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Technical Report

# **ECONOMIC IMPACT OF AVIATION IN NEBRASKA**

Prepared for:

**NEBRASKA DEPARTMENT OF AERONAUTICS**

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## THE ECONOMIC IMPACT OF AVIATION IN NEBRASKA

Airports and aviation are essential elements of today's national economy and transportation system. They provide a quick, efficient, and safe method to move people and goods, and they improve the quality of life of every citizen. As important as the network of airports is to the nation's well-being, so too are airports to the economy of the State of Nebraska. The Nebraska Airport System provides an integral link to the rest of the country and the world, as well as serving as a significant source of transportation and economic stimulus within Nebraska.

Nebraska airports are significant generators of revenues, wages, and jobs for the State. Not only do the airports themselves generate economic benefits, but also many other non-aviation employers who rely on the Nebraska Airport System to support their daily business activities also contribute to building the State's economy. While most people of Nebraska are quite familiar with large commercial airline airports in the State, such as Omaha's Eppley Field, many are less familiar with the State's other public-use airports. In order for citizens to more fully understand the relationship between Nebraska public-use airports and the statewide economy, an economic impact analysis was undertaken by the Nebraska Department of Aeronautics.

This study shows that many people, even beyond the immediate environs of each airport, derive significant economic benefits from the daily operation of the airport system. These groups include the commercial and industrial employers whose shipments arrive or depart via the airports; employees of businesses and corporations who base corporate aircraft at Nebraska airports; and quite significantly the tourism industry including hotels, restaurants and tourism related activities whose patrons use the general aviation airports to visit Nebraska tourism destinations.

The primary focus of this study is on the identifiable and quantifiable impacts to the State and local economies resulting from the 88 airports studied (see **Exhibit 1**). Another goal of this study was to evaluate some of the less-quantifiable benefits linked with aviation such as quality of life contributions including health, safety, recreation, education, and overall community support.

A detailed quantitative modeling effort was undertaken to quantify the economic impacts that occur as a result of on-airport activities (airlines, fixed base operators, flight schools, corporate flight departments, government, and various other business). In addition, benefits that are derived from the expenditures of visitors who arrive via scheduled service and general aviation aircraft are also quantified. These on-airport impacts and visitor expenditures support additional economic activity throughout Nebraska. As initial waves of activities associated with the airport system are released into Nebraska's economy, successive waves of employment, payroll, and economic benefit occur. These additional benefits are measured using sector-specific employment, payroll, and economic benefit multipliers.

Non-aviation businesses in Nebraska and their clients and suppliers use aviation in a wide variety of ways to support their daily operations in the State and to grow and expand their overall business activity. Quantifying the airport system's role in promoting overall business development and growth throughout the State is less precise. Nevertheless, when the benefits of an airport system are reviewed, these less tangible economic contributions must also be considered. Many businesses

indicate that the efficiency gained through their use of aviation allows their company to increase sales and productivity. These gains, in many cases, lead to increases in employment and overall economic activity. Quantifying these impacts is difficult; however, this study draws general conclusions regarding these additional impacts based on the results of a non-aviation business survey effort that included approximately 3,000 Nebraska businesses.

The economic impact analysis is presented in the following sections:

- ❑ *Nebraska Population and Employment*
- ❑ *Methodology*
- ❑ *Statewide Economic Impact of Airports*
- ❑ *Capital Improvement-Related Construction Impacts*
- ❑ *Property Tax Impacts*
- ❑ *Qualitative Airport Benefits*
- ❑ *Business Use of Nebraska Airports*
- ❑ *Economic Impacts of Off-Airport Aerial Applicators*
- ❑ *Economic Impacts by Airport*

## 1. NEBRASKA POPULATION AND EMPLOYMENT

In 1990, the U.S. Census placed the population of Nebraska at 1,578,417 residents. By 2000 the figure population had grown by 132,848 residents to 1,713,375. Natural increases (births exceeding deaths) contributed to the state's population growth, but a significant factor was international migration. Estimated Nebraska population (non-U.S. Census) for 2002 is 1,729,180 residents. **Table 1** identifies Nebraska population trends (1990-2000), by county.

Between 1990 and 2000, 52 of the State's 93 counties experienced an overall decline in population while 41 counties experienced a net increase in population. Counties experiencing population decline tended to have lower populations than those counties that gained residents. Only five counties that lost population between 1990 and 2000 had initial populations of over 10,000 residents. Fourteen counties grew at a rate equal to or greater than Nebraska's compounded annual growth rate (1990-2000) of 0.8 percent. The 1990 population of the 14 counties that exhibited greater growth over the 10-year period averaged over 67,200 residents, indicating that population growth is occurring in metropolitan areas.

According to the U.S. Census data for 2000, Douglas County was the most populated county in the State with nearly 465,000 residents. Arthur County had the smallest population with 442 residents. Dawson and Dakota Counties had the two largest population growth rates for all Nebraska counties during the 10-year period with both achieving a compounded annual growth rate of approximately 2 percent (2.0 and 1.9 percent respectively).

**Exhibit 2** identifies population level per county in Nebraska. The Omaha and Lincoln metropolitan areas are the most heavily populated areas in the State. The north-central and western regions of Nebraska have the lowest population. The Interstate 80 corridor, which runs east-west through the south-central portions of the State, is moderately populated.

**Table 1**  
**Nebraska Economic Impact Study**  
**NEBRASKA POPULATION GROWTH 1990-2000**

County	1990	2000	Loss/Gain	County	1990	2000	Loss/Gain
Adams	29,639	31,170	5.2%	Jefferson	8,746	8,334	-4.7%
Antelope	7,942	7,444	-6.3%	Johnson	4,666	4,488	-3.8%
Arthur	468	442	-5.6%	Kearney	6,622	6,883	3.9%
Banner	860	824	-4.2%	Keith	8,578	8,854	3.2%
Blaine	662	582	-12.1%	Keya Paha	1,025	979	-4.5%
Boone	6,668	6,217	-6.8%	Kimball	4,071	4,062	-0.2%
Box Butte	13,116	12,115	-7.6%	Knox	9,546	9,344	-2.1%
Boyd	2,830	2,427	-14.2%	Lancaster	214,655	251,223	17.0%
Brown	3,656	3,521	-3.7%	Lincoln	32,511	34,652	6.6%
Buffalo	37,603	42,321	12.5%	Logan	872	771	-11.6%
Burt	7,880	7,795	-1.1%	Loup	680	713	4.9%
Butler	8,580	8,865	3.3%	McPherson	551	531	-3.6%
Cass	21,359	24,399	14.2%	Madison	32,709	35,171	7.5%
Cedar	10,130	9,584	-5.4%	Merrick	8,057	8,168	1.4%
Chase	4,404	4,048	-8.1%	Morrill	5,428	5,445	0.3%
Cherry	6,283	6,143	-2.2%	Nance	4,259	4,041	-5.1%
Cheyenne	9,488	9,832	3.6%	Nemaha	7,972	7,568	-5.1%
Clay	7,117	7,033	-1.2%	Nuckolls	5,762	5,026	-12.8%
Colfax	9,161	10,455	14.1%	Otoe	14,216	15,426	8.5%
Cuming	10,109	10,174	0.6%	Pawnee	3,306	3,083	-6.7%
Custer	12,277	11,797	-3.9%	Perkins	3,366	3,177	-5.6%
Dakota	16,829	20,285	20.5%	Phelps	9,701	9,740	0.4%
Dawes	8,972	9,027	0.6%	Pierce	7,815	7,849	0.4%
Dawson	20,032	24,437	22.0%	Platte	29,864	31,531	5.6%
Deuel	2,244	2,108	-6.1%	Polk	5,653	5,615	-0.7%
Dixon	6,148	6,319	2.8%	Red Willow	11,672	11,449	-1.9%
Dodge	34,499	36,234	5.0%	Richardson	9,963	9,511	-4.5%
Douglas	417,941	464,577	11.2%	Rock	2,009	1,759	-12.4%
Dundy	2,583	2,294	-11.2%	Saline	12,711	13,863	9.1%
Fillmore	7,088	6,619	-6.6%	Sarpy	103,024	123,191	19.6%
Franklin	3,932	3,548	-9.8%	Saunders	18,352	19,854	8.2%
Frontier	3,094	3,088	-0.2%	Scotts Bluff	35,992	36,990	2.8%
Furnas	5,530	5,303	-4.1%	Seward	15,489	16,529	6.7%
Gage	22,813	22,984	0.7%	Sheridan	6,690	6,177	-7.7%
Garden	2,452	2,281	-7.0%	Sherman	3,702	3,294	-11.0%
Garfield	2,148	1,895	-11.8%	Sioux	1,539	1,472	-4.4%
Gosper	1,928	2,143	11.2%	Stanton	6,282	6,426	2.3%
Grant	759	747	-1.6%	Thayer	6,610	6,045	-8.5%
Greeley	3,000	2,705	-9.8%	Thomas	850	734	-13.6%
Hall	49,118	53,514	8.9%	Thurston	6,934	7,184	3.6%
Hamilton	8,853	9,389	6.1%	Valley	5,169	4,647	-10.1%
Harlan	3,806	3,777	-0.8%	Washington	16,638	18,795	13.0%
Hayes	1,220	1,074	-12.0%	Wayne	9,375	9,801	4.5%
Hitchcock	3,744	3,102	-17.1%	Webster	4,276	4,054	-5.2%
Holt	12,577	11,493	-8.6%	Wheeler	947	885	-6.5%
Hooker	799	781	-2.3%	York	14,421	14,575	1.1%
Howard	6,043	6,554	8.5%				
<b>Nebraska Total</b>	<b>1,581,660</b>	<b>1,713,375</b>	<b>8.3%</b>				
<b>US Total Population Growth:</b>			<b>13.1%</b>				

Source: US Census Bureau

***Economic Activity***

Nebraska had a Gross State Product (GSP) over \$56.97 billion in 2001, ranking the State 37th overall in the country. The top industry contributors to Nebraska GSP are the following:

- Services
- Finance, Insurance and Real Estate
- Government
- Manufacturing
- Transportation & utilities
- Retail trade
- Business Services
- Wholesale trade

***Cost of Living***

In a quarterly community cost of living index compiled by American Chamber of Commerce Researchers Association (ACCRA), Nebraska’s cost of living has generally been below the national average. In the first quarter of 2003, four Nebraska communities (Omaha, Lincoln, Grand Island and Hastings) in the survey averaged a composite index of 95.1 (a score of 100 is the national average). In individual cost of living sectors, all the Nebraska communities scored below the national average for health care. Omaha was also below the national average for grocery costs and housing costs; Lincoln was also below the average for grocery costs and utilities costs. The non-metropolitan communities of Grand Island and Hastings were below the average for housing costs and health care costs.<sup>1</sup>

***Employment***

Services, retail trade, government and manufacturing sectors support the bulk of Nebraska employment. The 2002 employment numbers for these sectors are as follows:

- Services 259,147
- Retail Trade 160,469
- Manufacturing 117,289
- Government 156,030

Nebraska has the second lowest unemployment rate among U.S. states (see **Table 2**). At the end of 2002, the State’s workforce numbered over 910,000. The annual average Nebraska unemployment rate has been among the lowest in the nation for the last decade. Only neighboring South Dakota has a lower unemployment rate. The annual average Nebraska unemployment rate was 2.6 percent in 1997; 2.7 percent in 1998; 2.9 percent in 1999; 3.0 percent in 2000; 3.1 percent in 2001; and 3.2 percent in 2002; compared to 4.9 percent, 4.5 percent, 4.2 percent, 4.0 percent, 4.8 percent, and 5.7 percent overall in the United States.

<sup>1</sup> Nebraska Department of Economic Development, *Recent Nebraska Economic Trends*, June, 2003

**Table 2**  
**Nebraska Economic Impact Study**  
**STATEWIDE UNEMPLOYMENT RATE AND RANK, 2002**

State	Rank	Rate (%)	State	Rank	Rate (%)
Oregon	1	7.0	Florida	26	5.1
Alaska	2	6.8	Utah	27	5.1
Illinois	3	6.7	Indiana	28	5.0
Mississippi	4	6.7	Kentucky	29	4.9
Washington	5	6.7	Missouri	30	4.9
California	6	6.4	Wisconsin	31	4.9
Texas	7	6.2	New Hampshire	32	4.8
West Virginia	8	6.2	Georgia	33	4.6
District of Columbia	9	6.0	Kansas	34	4.6
North Carolina	10	6.0	Nevada	35	4.5
Louisiana	11	5.8	Tennessee	36	4.5
New Mexico	12	5.8	Montana	37	4.3
Arizona	13	5.7	Connecticut	38	4.2
New York	14	5.7	Maine	39	4.1
United States	0	5.7	Oklahoma	40	4.1
Alabama	15	5.6	Hawaii	41	4.0
Michigan	16	5.6	Iowa	42	4.0
Ohio	17	5.6	Delaware	43	3.9
Idaho	18	5.5	Maryland	44	3.9
New Jersey	19	5.5	Minnesota	45	3.9
South Carolina	20	5.5	Vermont	46	3.9
Pennsylvania	21	5.3	Wyoming	47	3.9
Colorado	22	5.2	Virginia	48	3.8
Massachusetts	23	5.2	North Dakota	49	3.7
Rhode Island	24	5.2	<b>Nebraska</b>	<b>50</b>	<b>3.2</b>
Arkansas	25	5.1	South Dakota	51	2.7

Source: U.S. Department of Labor, Bureau of Labor Statistics

### **Compensation**

Average annual compensation for employed Nebraska residents in 2002 was nearly \$31,000. The employment sector with the highest average wage (\$36,660) was the Finance, Insurance and Real Estate sector. The Transportation and Public Utilities sector had the second highest average annual wage (\$36,167). Employees in the retail trade sector earned the lowest average annual wage in Nebraska (\$16,751).

**Table 3**  
**Nebraska Economic Impact Study**  
**Non-Farm Employment and Wages, 2002**

<b>Occupational title</b>	<b>Estimated Employment</b>	<b>Mean Wage</b>	<b>Entry Wage</b>	<b>Expert Wage</b>	<b>Median Wage</b>
Agriculture, forestry and fishing	5,760	\$25,126	\$15,213	\$30,083	\$20,728
Mining	1,230	\$31,579	\$20,449	\$37,144	\$31,974
Construction	44,015	\$34,049	\$20,322	\$40,913	\$29,878
Manufacturing	117,289	\$31,240	\$19,534	\$37,093	\$26,410
Transportation and public utilities	57,812	\$36,167	\$20,516	\$43,993	\$33,301
Wholesale Trade	52,458	\$32,788	\$17,605	\$40,379	\$26,651
Retail Trade	160,469	\$16,751	\$13,173	\$23,954	\$20,360
Finance, Insurance, and Real Estate	62,189	\$36,660	\$18,999	\$45,490	\$28,720
Services	259,147	\$32,536	\$16,276	\$40,667	\$25,210
Public Administration	156,030	\$35,512	\$19,705	\$43,415	\$32,321
<b>Total all occupations</b>	<b>910,639</b>	<b>\$30,869</b>	<b>\$15,974</b>	<b>\$38,316</b>	<b>\$24,839</b>

Source: Nebraska Office of Workforce Services Labor Market Information Center, Nebraska Department of Labor

## 2. METHODOLOGY

Aviation is an important factor influencing the continued growth and development of Nebraska's economy. The total economic impact or contribution of each airport in the State's system is quantified in this study in terms of employment, payroll, and output. The impacts generated by three aviation-dependent groups were measured as part of this study. These aviation-dependent groups are:

- ❑ *On-airport tenants*
- ❑ *Visitors traveling to/within Nebraska via commercial service airlines*
- ❑ *Visitors traveling to/within Nebraska via general aviation aircraft*

On-airport tenants and visitors who arrive in Nebraska via the State's airports are directly responsible for a significant percentage of the economic activity or benefits associated with the airport system. The qualitative health, welfare, and social benefits of Nebraska's airports are also identified and presented in this study.

The discussion of study approach is presented in two separate subsections, as follows:

- ❑ *The Economic Modeling Process*
- ❑ *Data Required for the Modeling Process*

### A. The Economic Modeling Process

All economic impacts or benefits of the Nebraska airport system were calculated using an input-output model. The input-output model used in this study uses three impact categories to assess the economic benefits associated with on-airport tenants, commercial airline visitors, and general aviation visitors. These three categories are:

- **First-Round Impacts** – *First round benefits include both direct and indirect impacts. Direct impacts are defined as those benefits that are associated with government agencies and businesses located on the airport. These businesses are directly related to the provision of aviation services. Direct impacts include the employment, payroll, and output related to businesses such as airlines, concessionaires, rental car operators, food and beverage providers, government employees, flight schools, fixed base operators (FBOs), and others. Direct impacts also include jobs, payroll and output as a result of on-airport construction activity.*

*Indirect impacts generally occur off-airport. These impacts are usually attributed to the spending of visitors who arrive in the State via a Nebraska airport. Spending by visitors supports jobs and payroll in service-related industries such as hotels/motels, restaurants, transportation, retail, and entertainment. For this analysis, visitor spending is classified as economic activity or output. It is notable that visitor spending on the aviation-related goods/services are not included in the visitor expenses, but are accounted for in the appropriate tenant's gross sales.*

All first round impacts associated with individual airports in this study were identified through survey efforts.

- **Secondary Impacts** – *Secondary impacts primarily consist of induced impacts. Induced impacts are those benefits that are the result of the recirculation of direct and indirect impacts within the economy. Recirculation of direct and indirect impacts within an economy is frequently referred to as the multiplier effect. For example, as an airport employee spends his or her salary for housing, food, or services, that spending circulates through the economy and leads to increases in associated spending, payroll, and employment throughout Nebraska.*

*For each wave of spending beyond the first round, a portion of the re-spending takes place outside the economic region being modeled (in this case, the State of Nebraska). Employment, payroll, and spending that take place outside Nebraska is considered economic leakage, and is, therefore, not reflected within the statewide multiplier.*

- **Total Impacts** – *Total impacts or benefits are the sum of all first-round and secondary economic activities at an airport or the airport system.*

As noted, first-round and secondary impacts are combined to provide an estimate of total economic impact. Because secondary impacts are not as easily measured as first-round impacts, a reliable method of estimating secondary impacts must be employed. A leading method used to estimate secondary impacts is the input-output model.

The Impact Analysis for Planning (IMPLAN) input/output model was used to measure the multiplier effect and quantify secondary impacts in this study. An input-output model, in its most basic form, is a linear model that estimates purchases and sales between the various sectors of the economy. This modeling process is considered to be one of the leading methods currently available for estimating the total economic impact of an industry (in this case, an airport). The U.S. Forest

Service in cooperation with several other government agencies initially developed the IMPLAN system. It is now considered one of the standard methods for evaluating the economic contribution of public facilities and has been used to estimate economic impacts for individual airports and systems of airports throughout the country.

The IMPLAN model contains a large economic database that is used to generate input-output tables. It includes data from sources such as Dunn and Bradstreet, the U.S. Department of Commerce, and the U.S. Census Bureau. IMPLAN multipliers and data tables specific to Nebraska industrial sectors were obtained and used in this analysis. The IMPLAN input-output model used for this analysis requires direct impact estimates for three separate components of the economy. These categories are:

- **Employment** – *Employment is based on full-time equivalent (FTE) positions. In this analysis, fractions of full-time equivalent positions may be interpreted as part-time jobs.*
- **Payroll** – *Payroll is the annual salary paid to all workers.*
- **Output (Spending)** – *Output for on-airport tenants is typically assumed to be the sum of annual gross sales and average annual capital expenditures. While this assumption works well for profit-oriented tenants, it must be modified for government tenants, airlines, and visitor impacts as they relate to output. Government entities typically do not generate sales. While airlines do generate sales, the ticket revenue is usually transferred outside the area being modeled. In order to estimate the impact of these two important tenant-related activities, government and airline output is equated with the sum of payroll, operating expenditures, and average annual capital improvement outlays. For visitors using the airport, output is assumed to equal visitor expenditures.*

It is important to note that payroll and output should not be combined because elements of economic benefit related to payroll are also contained, to some extent, in the output estimate. Each of the three impact components (employment, payroll, and output) stands alone as a measure of an airport's total economic impact.

## **B. Data Required for the Modeling Process**

A number of data collection efforts were undertaken to gather information related to actual economic activity occurring at Nebraska airports. The collected data were used as inputs in the modeling process to identify the total economic impact of Nebraska's system of airports. The following three groups were surveyed to obtain first-round impact data for the State:

- **On-Airport Tenants** – *This group includes airport tenants with employees, such as airlines, fixed-base operators (FBOs), flight schools, concessionaires, airport restaurants, and governmental agencies. It should be noted that governmental agencies include public airport sponsors, the Nebraska Department of Aeronautics, the Federal Aviation Administration, as well as various other State and Federal agencies.*
- **Commercial Airline Visitors** – *This group includes estimated non-local passengers (visitors) departing via commercial airlines at Nebraska's 10 airports with airline service. Average*

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*expenditures for these groups were identified through industry averages based on passenger surveys at commercial service airports throughout the United States.*

- ***General Aviation Visitors*** – *Impacts from general aviation visitors are generated by non-local passengers arriving via private or corporate aircraft. For this analysis, general aviation visitors were assumed to be associated with that portion of each airport's itinerant general aviation activity that is truly transient (or visiting) in nature. First-round impacts for this group were identified using data collected from general aviation visitor surveys conducted in cooperation with the managers and/or FBOs at select Nebraska airports.*

All first-round on-airport impacts presented in this analysis were identified through data collected from Nebraska airports. IMPLAN multipliers were then applied to the first-round impacts to estimate all subsequent secondary economic impacts. By using actual survey data to estimate all first-round impacts, a high degree of confidence can be placed on the final results.

### **1. Data Collection**

First-round impacts for each type of aviation-user including tenants, commercial airline visitors, general aviation visitors, and non-aviation businesses were identified through survey efforts. General aviation and commercial airline visitor analysis is based on data gathered for similar studies in Nebraska and in nearby states. This aspect of the analysis is important to ensure that final economic impact estimates are valid, since estimates of secondary impacts are driven by estimates of first-round impacts.

The methods used to collect information related to each group sampled in this analysis are discussed in the following sections. For the remainder of the analysis, it is important to note that some numbers may not add, due to rounding.

#### **a. Airport Tenants**

Airport sponsors/owners were contacted to provide names, mailing addresses, and telephone numbers for each airport tenant. All airport tenants having employees on Nebraska airports during 2002 were contacted to collect information regarding their economic activity. Surveys were then sent to each tenant and follow-up calls were made to ensure responses and to verify information on returned surveys. Airport tenants at each airport were grouped into several categories to aid in data interpolation. These categories include:

- *Local/State/Federal Government (this category includes airport management, city personnel, etc.)*
- *Passenger Airlines*
- *Air Cargo Airlines*
- *Concessionaires*
- *FBO/Flight Instruction/Aircraft Maintenance/Air Taxi*
- *Other*

The surveys sent to each airport tenant (including airport sponsors/managers) requested the following specific pieces of information:

- 
- *Type of aviation activity conducted by the tenant*
  - *Number of full-time and part-time employees employed by their business on the airport in 2002*
  - *Total annual wages and benefits paid to their on-airport employees in 2002*
  - *Amount paid by the business property taxes in 2002*
  - *Total capital improvement expenditures by the business on the airport for each year 2000 through 2002*
  - *Total operating expenses for the business at the airport (excluding payroll and capital improvements previously identified)*
  - *Total gross sales (where applicable) by the business on the airport during 2000*

In addition, airport tenants were asked to identify any businesses that sub-lease property from them on the airport so that they could also be included in the analysis.

A 100 percent response rate was desired for the tenant survey; however, some tenants were unwilling to participate and others only provided portions of the requested information. Several rounds of follow-up telephone calls were made to non-responding tenants and to airport managers to obtain a 100 percent response rate for on-airport tenant employment. For tenants who did not supply complete information on payroll and output, estimates were developed for each using ratios of payroll per employee and output per employee developed from those Nebraska tenants who did respond to the survey. For example, average output per employee for all reporting FBOs at study airports was used to estimate the annual sales for an FBO not reporting total sales on the tenant survey.

Each tenant was grouped by their standard industrial classification (SIC) code based on the primary service or good they provide. This was done to facilitate subsequent IMPLAN modeling to estimate secondary impacts. The SIC is the most common sector-specific list used to describe industry types. For example, airlines, aircraft maintenance, flight schools, FBOs, air cargo, and corporate flight departments were combined in the air transportation SIC code.

*b. Commercial Airline Visitors*

Airline flights to and from Nebraska's airports provide access for thousands of business and pleasure-related visitors. Visitors using airline-served airports as a gateway to the State contribute to the economy through their expenditures for food, lodging, entertainment, transportation, retail sales, and other goods and services. Numerous service industries also benefit from the multiplier effects stemming from visitor spending. The spending patterns of commercial airline visitors to Nebraska were estimated based on the results of departing passenger surveys conducted at airports with airline service in nearby states, on industry averages and survey data collected for an economic study at Lincoln Municipal Airport.

During a typical passenger survey, departing passengers are interviewed prior to boarding and asked several questions. Departing passengers are first asked to indicate whether they are a resident of the airport area or a visitor. Those passengers who indicated that they are visitors to the area are then asked several questions to determine the following:

- *The purpose of their trip to the airport area (business, personal, military, or other)*

- *Duration of their stay*
- *Total expenditures during their stay in each of the following categories: lodging, food and beverage, rental car/limo/taxi, entertainment, retail, and other*
- *The total number of people that accounted for the expenditure estimates that they identified*

The following methodology was used to estimate commercial airline visitor impacts:

- *Enplanement data for 2002 were gathered from each airport with airline service. The ratio of local passengers to visitor passengers was assumed at 50 percent, and then applied to the annual enplanement data to determine the number of annual visitors using the airport.*
- *Average length of stay and average daily expenditures for visitors to each of the airports was based on industry averages and survey data collected for an economic study at Lincoln Municipal Airport. These estimates were applied to the estimate of the number of annual visitors to each airport to determine the total economic activity (or output) generated by airline passenger visitors at each airport on an annual basis.*
- *In order to estimate the employment associated with commercial airline visitor expenditures, Nebraska-specific employment ratios per one million dollars of visitor output were developed using the IMPLAN model. It was estimated that approximately 31 persons are employed in Nebraska as result of every \$1 million in commercial airline visitor output (spending). (Expenditures by general aviation visitors create 38 jobs per million dollars spent due to variations in expenditure ratios).*
- *In order to estimate the payroll impacts associated with employment generated by commercial airline visitors, average State wages for appropriate industry sectors were applied to the estimated number of employees. Most of the direct visitor expenditures take place in the hotel/motel, food/beverage, entertainment, retail, and transportation sectors. Based on data obtained from the U.S. Bureau of Labor Statistics, an average annual payroll of \$16,700 per employee in these job categories was assumed.*

For example, **Table 4** indicates that Central Nebraska Regional Airport reported a total of 5,434 enplanements during 2002. Based on the assumption that 50 percent of enplaning passengers are visitors, it was determined that 2,717 of the total enplanements were non-local travelers or visitors to the area. Each of these visitors spent an estimated \$102 per day during their trip. This information yields a total annual visitor expenditure estimate of nearly \$1.2 million. This expenditure is then equated with output. IMPLAN indicates that for every \$1 million of output in the hotel, food and beverage, retail, and entertainment industries, approximately 31 full time positions are created.

**TABLE 4**  
**Nebraska Economic Impact Study**  
**ANNUAL COMMERCIAL AIRLINE VISITOR-RELATED EXPENDITURES**

Associated City	Airport Name	2002		Annual Visitor	Visitor Days	Annual Visitor Expenditures
		Passenger Enplanements	Percent Visitor			
Alliance	Alliance Municipal	836	50%	418	1,756	\$179,100
Chadron	Chadron Municipal Airport	976	50%	488	2,050	\$209,100
Grand Island	Central Nebraska Regional	5,434	50%	2,717	11,411	\$1,164,000
Kearney	Kearney Municipal	4,923	50%	2,462	10,338	\$1,054,500
Lincoln	Lincoln Municipal	230,389	50%	115,195	483,817	\$49,349,300
McCook	McCook Municipal	1,719	50%	860	3,610	\$368,200
Norfolk	Karl Stefan Memorial Airport	1,243	50%	622	2,610	\$266,300
North Platte	North Platte Regional/Lee Bird Field	5,662	50%	2,831	11,890	\$1,212,800
Omaha	Eppley Airfield	1,881,033	50%	940,517	3,950,169	\$402,917,300
Scottsbluff	W. Nebraska Regional/Heilig Field	8,540	50%	4,270	17,934	\$1,829,300
<b>Nebraska Total</b>		<b>2,140,755</b>	<b>50%</b>	<b>1,070,378</b>	<b>4,495,586</b>	<b>\$458,549,900</b>

Source: Wilbur Smith Associates, Inc. and Nebraska Department of Aeronautics data

Multiplying \$1.2 million by 31 yields an estimated 36 visitor-related jobs associated with this airport. Since most of these visitor-generated jobs are in the service and retail industries, multiplying the total number of visitor-created jobs by an average payroll of \$16,700 produces a total annual payroll impact of approximately \$601,200.

It should be noted that 2002 enplanement statistics reported in Table 4 represent all-time low traffic for most of Nebraska's airports. Preliminary data for the year of 2003 indicate significant increases in passenger traffic over 2002 levels.

*c. General Aviation Visitors*

The economic activity generated by general aviation visitors at airports throughout the State was identified through a transient pilot survey effort. During on-site airport visits surveys were left with FBOs and airport management representatives at 20 airports throughout Nebraska. It was requested that the surveys be distributed to transient pilots arriving at each airport. The survey requested information related to the following:

- *Number of travelers in the aircraft*
- *Type of aircraft operated by the pilot*
- *Purpose of the trip*
- *Length of stay*
- *Estimated expenditures during trip*

This survey effort was used to estimate general aviation visitors and their associated economic activity. Estimates of transient aircraft operations at each Nebraska airport were gathered from airport management surveys. Where estimates were not available, itinerant operations were taken from each airport's FAA 5010 form. By definition, true transient flights are assumed to have departed an airport at least 150 miles away from the destination airport.

Approximately one-third of all itinerant operations are considered true transient flights. Itinerant operations are defined as non-training flights or aircraft that enter or leave an airport's airspace. Estimates of itinerant operations were further refined to determine the number of true transient operations at each airport.

Based on survey data, the average general aviation visitor spends one day at a general aviation airport. Survey data also indicates that the average aircraft transported 3.3 persons per aircraft and that these visitors on average spend \$45 dollars per person per day on expenses other than aircraft-related expenses.

An example of how overall general aviation visitor impacts were calculated at study airports follows:

- *The number of itinerant general aviation arrivals was estimated using data obtained from airport management estimates, tower counts, FAA 5010 forms, and other sources. For example, if an airport estimates that it has 60,000 annual itinerant operations (including arrivals and departures), dividing 60,000 by two yields 30,000 annual itinerant arrivals.*
- *The number of itinerant arrivals performed by true transients is required to calculate visitor impacts; true transients are aircraft that have departed from an airport at least 150 nautical miles away. It is estimated by Aircraft Owners and Pilots Association that 33 percent of itinerant arrivals at general aviation airports are typically true transients. These true transient flights are equated with either business or pleasure visitors. Therefore, approximately 33 percent of 30,000 itinerant arrivals equal 10,000 true transient arrivals.*
- *The findings from transient pilot surveys regarding average number of aircraft occupants and average trip length were then applied to estimates of true transient arrivals to determine total general aviation visitor days at each airport. The average trip length at airports across the state averaged 1.0 days based on the travel patterns identified through transient pilot surveys. It is important to note that while some visitors will stay in the airport area for more than a day, many visitors using general aviation may stay for only a few hours.*
- *For this example, the 10,000 true transient arrivals yield the following number of total visitor days:*
  - *10,000 arrivals x 1.2 days x 3.3 persons/aircraft = 39,600 Total Visitor Days*
- *To calculate the impact these visitors have on the economy, it was necessary to estimate average expenditures per visitor, per day, for the airports. The typical visitor expenditure was then applied to the estimated number of visitor days to produce direct general aviation visitor expenditures (output). This expenditure figure is equated with direct visitor output:*
  - *39,600 days x \$45/person/day = \$1,782,000 of direct visitor output at the example airport*
- *To determine direct payroll and employment impacts, IMPLAN ratios based on \$1 million of output were used for each industry category. For example, ratios developed by the IMPLAN*

*model indicate that for every \$1 million of direct general aviation visitor output, approximately 38 full-time positions in service/retail industries are created. Visitors using general aviation at this example airport would then support approximately 67.5 full-time positions. The average statewide salary for service/retail industries (\$16,700) is then applied to the estimate of employment to determine direct payroll impacts associated with general aviation visitors. For this example, visitor-related direct payroll is equal to \$1,127,250 (67.5 employees x \$16,700).*

**Table 5** and **Table 6** present the estimated general aviation visitor impacts for each of the study airports.

## **2. Impact Multipliers**

First-round impacts associated with system airports were estimated through the detailed survey process previously explained. Employment, payroll, and output impacts derived from the on-airport tenant surveys, commercial airline visitor surveys, and general aviation transient pilot surveys represent the first-round impacts identified in this study. As these first-round impacts are introduced into the economy, they circulate among other sectors of the economy, creating successive waves of additional spending. This phenomenon is referred to as the multiplier effect. Multiplier effects are referred to in this study as secondary impacts.

Multiplier effects arise from various interdependencies within an economic system. For example, the operation of an airport requires inputs in the form of supplies, equipment, and maintenance. These inputs generate a boost in sales for those firms or businesses providing these products. Moreover, these goods and services themselves require inputs for their production. The process continues as a large number of impacts ripple through the economy. The total requirement for goods and services is a multiple of the direct needs of the Nebraska airports; hence they are referred to using the term “multiplier.”

Multipliers for all secondary impacts were derived from the IMPLAN model. The multipliers that were used in this analysis were developed specifically to measure economic impacts in the State of Nebraska. Individual multipliers must be used for each sector of the economy being modeled. As previously mentioned, individual IMPLAN multipliers were developed for various SIC codes. The SIC is the most commonly used sector-specific list used to develop multipliers. Those SICs used for modeling on-airport and visitor impacts in this study are depicted in **Table 7**.

While these SIC groups do not cover all on-airport tenant and arriving visitor impact categories, they do provide a representative average for generating multipliers. For example, government expenditures at the airports were grouped into engineering services and various types of construction SIC codes. Commercial airline and general aviation visitor expenditures were grouped in retail sales, auto rental, hotel/motel, and food/beverage SIC codes.

The multipliers presented in **Table 7** were used to estimate secondary impacts in this analysis. For example, \$100 in direct expenditures (output) in the air transportation sector creates secondary output impacts equivalent to \$51.30.

Although actual survey data for tenants were used for estimating direct output, it was not possible to obtain actual direct payroll and employment figures resulting from visitor activities. The IMPLAN model, however, provides multipliers that calculate these important employment impacts based on estimates of visitor output.

**TABLE 5  
ANNUAL AIRCRAFT OPERATIONS**

Associated City	Airport Name	Total Ops	Itinerant Operations	Intinerant Arrivals	Estimated True Transient Arrivals
<b>National Airports</b>					
Alliance	Alliance Municipal	15,000	6,000	3,000	990
Chadron	Chadron Municipal Airport	4,250	2,000	1,000	330
Grand Island	Central Nebraska Regional	42,624	11,400	5,700	1,881
Kearney	Kearney Municipal	33,300	17,125	8,563	2,826
Lincoln	Lincoln Municipal	105,827	41,679	20,840	6,877
McCook	McCook Municipal	17,800	9,000	4,500	1,485
Norfolk	Karl Stefan Memorial Airport	28,990	11,000	5,500	1,815
North Platte	North Platte Regional/Lee Bird Field	32,814	18,000	9,000	2,970
Omaha	Eppley Airfield	143,973	42,096	21,048	6,946
Scottsbluff	Western Nebraska Regional/William B. Heilig Field	30,300	13,000	6,500	2,145
Beatrice	Beatrice Municipal	10,058	4,724	2,362	779
Columbus	Columbus Municipal	15,000	9,000	4,500	1,485
Fremont	Fremont Municipal	20,150	6,200	3,100	1,023
Hastings	Hastings Municipal	19,000	10,000	5,000	1,650
Plattsmouth	Plattsmouth Municipal	15,800	9,500	4,750	1,568
Sidney	Sidney Municipal	10,800	8,000	4,000	1,320
Valentine	Miller Field	2,434	1,026	513	169
York	York Municipal	10,050	3,500	1,750	578
<b>National Airports Subtotal</b>		<b>558,170</b>	<b>223,250</b>	<b>111,625</b>	<b>36,836</b>
<b>Regional Airports</b>					
Ainsworth	Ainsworth Municipal	3,550	2,500	1,250	413
Albion	Albion Municipal	5,100	1,000	500	165
Blair	Blair Municipal	14,100	900	450	149
Broken Bow	Broken Bow Municipal	7,162	1,100	550	182
Crete	Crete Municipal	18,050	2,200	1,100	363
Falls City	Brenner Field	6,504	2,700	1,350	446
Gordon	Gordon Municipal	4,400	2,000	1,000	330
Holdrege	Brewster Field	10,100	2,700	1,350	446
Imperial	Imperial Municipal	9,700	1,200	600	198
Kimball	Kimball Municipal/Robert E. Arraj Field	6,540	1,600	800	264
Lexington	Jim Kelly Field	10,340	2,000	1,000	330
Nebraska City	Nebraska City Municipal	4,250	1,350	675	223
Neligh	Antelope Co.	5,100	2,300	1,150	380
Ogallala	Searle Field	4,713	3,090	1,545	510
Omaha	Omaha-Millard	71,575	32,400	16,200	5,346
O'Neill	The O'Neill Municipal/John Baker Field	7,440	3,600	1,800	594
Ord	Evelyn Sharp Field	7,900	2,300	1,150	380
Seward	Seward Municipal	12,150	3,250	1,625	536
Superior	Superior Municipal	5,500	500	250	83
Wahoo	Wahoo Municipal	13,150	3,000	1,500	495
Wayne	Wayne Municipal	36,000	1,000	500	165
<b>Regional Airports Subtotal</b>		<b>263,324</b>	<b>72,690</b>	<b>36,345</b>	<b>11,994</b>

TABLE 5 (Cont.)  
ANNUAL AIRCRAFT OPERATIONS

Associated City	Airport Name	Total Ops	Itinerant Operations	Intinerant Arrivals	Estimated True Transient Arrivals
<b>Local Airports</b>					
Atkinson	Stuart-Atkinson Municipal	3,000	1,000	500	165
Auburn	Farington Field	2,350	800	400	132
Aurora	Aurora Municipal	15,325	4,750	2,375	784
Cambridge	Cambridge Municipal	6,500	1,250	625	206
Central City	Central City	4,360	1,740	870	287
Cozad	Cozad Municipal	9,062	2,350	1,175	388
Creighton	Creighton Municipal	2,200	200	100	33
Curtis	Curtis Municipal	6,050	550	275	91
David City	David City Municipal	2,200	500	250	83
Fairbury	Fairbury Municipal	7,250	500	250	83
Fairmont	Fairmont State	1,930	220	110	36
Grant	Grant Municipal	5,800	800	400	132
Hartington	Hartington Municipal	6,750	800	400	132
Hebron	Hebron Municipal	3,176	600	300	99
Hyannis	Grant County	1,825	125	63	21
Loup City	Loup City Municipal	1,550	350	175	58
Minden	Pioneer Village Field	7,100	1,600	800	264
Omaha	Omaha-North	12,250	1,250	625	206
Oshkosh	Garden County	5,820	2,300	1,150	380
Red Cloud	Red Cloud Municipal	1,910	400	200	66
Scribner	Scribner State	2,600	500	250	83
South Sioux City	Martin Field	24,400	6,900	3,450	1,139
Tekamah	Tekamah	27,020	8,000	4,000	1,320
Thedford	Thomas Co.	6,250	100	50	17
Wallace	Wallace Municipal	28,149	11,550	5,775	1,906
<b>Local Airports Subtotal</b>		<b>194,827</b>	<b>49,135</b>	<b>24,568</b>	<b>8,107</b>
<b>Limited Airports</b>					
Other Airports		51,650	13,157	6,579	2,171
<b>Limited Airports Subtotal</b>		<b>51,650</b>	<b>13,157</b>	<b>6,579</b>	<b>2,171</b>
<b>Total</b>		<b>1,067,971</b>	<b>358,232</b>	<b>179,116</b>	<b>59,108</b>

Source: Wilbur Smith Associates, Inc., & FAA Form 5010 data

Other airports include: Alma Municipal, Arapahoe Municipal, Arthur, Basset/Rock County, Bloomfield Municipal, Burwell/Cram Field, Chambers/Perkins Memorial, Chappel/Billy G. Ray Field, Genoa Municipal, Gothenburg/Quinn Field, Greeley Municipal, Harrison SkyRanch, Harvard State, Hay Springs Municipal, Mullen/Hooker County, Pawnee City Municipal, Pender Municipal, Rushville/Modisett Field, Sargent Municipal, Springview Municipal, Stromsberg Municipal, Tecumseh, Trenton Municipal, Utica/Flying V, & Wilber Municipal

**TABLE 6**  
**ANNUAL GENERAL AVIATION VISITOR EXPENDITURES**

Associated City	Airport Name	Estimated True Transient Arrivals	Annual Visitors	Total Annual Days Stayed	Annual Visitor Expenditure
<b>National Airports</b>					
Alliance	Alliance Municipal	990	3,267	3,920	\$176,400
Chadron	Chadron Municipal Airport	330	1,089	1,307	\$58,800
Grand Island	Central Nebraska Regional	1,881	6,207	7,449	\$335,200
Kearney	Kearney Municipal	2,826	9,325	11,189	\$503,500
Lincoln	Lincoln Municipal	6,877	22,694	27,233	\$1,225,500
McCook	McCook Municipal	1,485	4,901	5,881	\$264,600
Norfolk	Karl Stefan Memorial Airport	1,815	5,990	7,187	\$323,400
North Platte	North Platte Regional/Lee Bird Field	2,970	9,801	11,761	\$529,300
Omaha	Eppley Airfield	6,946	22,921	27,506	\$1,237,700
Scottsbluff	Western Nebraska Regional/William B. Heilig Field	2,145	7,079	8,494	\$382,200
Beatrice	Beatrice Municipal	779	2,572	3,087	\$138,900
Columbus	Columbus Municipal	1,485	4,901	5,881	\$264,600
Fremont	Fremont Municipal	1,023	3,376	4,051	\$182,300
Hastings	Hastings Municipal	1,650	5,445	6,534	\$294,000
Plattsmouth	Plattsmouth Municipal	1,568	5,173	6,207	\$279,300
Sidney	Sidney Municipal	1,320	4,356	5,227	\$486,100
Valentine	Miller Field	169	559	670	\$30,200
York	York Municipal	578	1,906	2,287	\$102,900
<b>Subtotal</b>		<b>36,836</b>	<b>121,560</b>	<b>145,872</b>	<b>\$6,814,900</b>
<b>Regional Airports</b>					
Ainsworth	Ainsworth Municipal	413	1,361	1,634	\$73,500
Albion	Albion Municipal	165	545	653	\$29,400
Blair	Blair Municipal	149	490	588	\$26,500
Broken Bow	Broken Bow Municipal	182	599	719	\$32,300
Crete	Crete Municipal	363	1,198	1,437	\$64,700
Falls City	Brenner Field	446	1,470	1,764	\$79,400
Gordon	Gordon Municipal	330	1,089	1,307	\$58,800
Holdrege	Brewster Field	446	1,470	1,764	\$79,400
Imperial	Imperial Municipal	198	653	784	\$35,300
Kimball	Kimball Municipal/Robert E. Arraj Field	264	871	1,045	\$47,000
Lexington	Jim Kelly Field	330	1,089	1,307	\$58,800
Nebraska City	Nebraska City Municipal	223	735	882	\$39,700
Neligh	Antelope Co.	380	1,252	1,503	\$67,600
Ogallala	Searle Field	510	1,683	2,019	\$90,900
Omaha	Omaha-Millard	5,346	17,642	21,170	\$952,700
O'Neill	The O'Neill Municipal/John Baker Field	594	1,960	2,352	\$105,900
Ord	Evelyn Sharp Field	380	1,252	1,503	\$67,600
Seward	Seward Municipal	536	1,770	2,124	\$95,600
Superior	Superior Municipal	83	272	327	\$14,700
Wahoo	Wahoo Municipal	495	1,634	1,960	\$88,200
Wayne	Wayne Municipal	165	545	653	\$29,400
<b>Subtotal</b>		<b>11,994</b>	<b>39,580</b>	<b>47,496</b>	<b>\$2,137,400</b>

TABLE 6 (Cont.)  
ANNUAL GENERAL AVIATION VISITOR EXPENDITURES

Associated City	Airport Name	Estimated True Transient Arrivals	Annual Visitors	Total Annual Days Stayed	Annual Visitor Expenditure
<b>Local Airports</b>					
Atkinson	Stuart-Atkinson Municipal	165	545	653	\$29,400
Auburn	Farington Field	132	436	523	\$23,500
Aurora	Aurora Municipal	784	2,586	3,104	\$139,700
Cambridge	Cambridge Municipal	206	681	817	\$36,800
Central City	Central City	287	947	1,137	\$51,200
Cozad	Cozad Municipal	388	1,280	1,535	\$69,100
Creighton	Creighton Municipal	33	109	131	\$5,900
Curtis	Curtis Municipal	91	299	359	\$16,200
David City	David City Municipal	83	272	327	\$14,700
Fairbury	Fairbury Municipal	83	272	327	\$14,700
Fairmont	Fairmont State	36	120	144	\$6,500
Grant	Grant Municipal	132	436	523	\$23,500
Hartington	Hartington Municipal	132	436	523	\$23,500
Hebron	Hebron Municipal	99	327	392	\$17,600
Hyannis	Grant County	21	68	82	\$3,700
Loup City	Loup City Municipal	58	191	229	\$10,300
Minden	Pioneer Village Field	264	871	1,045	\$47,000
Omaha	Omaha-North	206	681	817	\$36,800
Oshkosh	Garden County	380	1,252	1,503	\$67,600
Red Cloud	Red Cloud Municipal	66	218	261	\$11,800
Scribner	Scribner State	83	272	327	\$14,700
South Sioux City	Martin Field	1,139	3,757	4,508	\$202,900
Tekamah	Tekamah	1,320	4,356	5,227	\$235,200
Theadford	Thomas Co.	17	54	65	\$2,900
Wallace	Wallace Municipal	1,906	6,289	7,547	\$339,600
<b>Subtotal</b>		<b>8,107</b>	<b>26,754</b>	<b>32,105</b>	<b>\$1,444,800</b>
<b>Limited Airports</b>					
Other Airports	Other Airports	363	1,198	1,437	\$387,000
<b>Subtotal</b>		<b>363</b>	<b>1,198</b>	<b>1,437</b>	<b>\$387,000</b>
<b>Total</b>		<b>57,300</b>	<b>189,091</b>	<b>226,909</b>	<b>\$10,784,100</b>

Source: Wilbur Smith Associates, Inc., & FAA Form 5010 data

### 3. Data Presentation

In the 2000 Nebraska State Airport System Plan (NASP) each airport was ranked to determine the demand for aviation. This ranking process led to the development of four aviation demand classifications. Based on discussion with the Department of Aeronautics, the following definitions were drafted for the four airport classifications:

**National** – maintains a consistent and contributing role in enabling the local, regional, and statewide economy to have access to and from the national and worldwide economy

**Regional** – maintains a contributing role in supporting the local and regional economies and connecting it to the State and National economies

**Local** – maintains a supplemental contributing role for the local economy

**Limited** – maintains a limited contributing role for the local economy

**Table 7  
IMPLAN MULTIPLIERS**

<b>Standard Industrial Classification</b>	<b>Total Employment Multiplier</b>	<b>Total Payroll Multiplier</b>	<b>Total Output Multiplier</b>
Aviation Related Tenants <sup>1</sup>	1.755	1.510	1.513
Concessions <sup>2</sup>	1.378	1.640	1.629
Construction <sup>3</sup>	2.308	1.746	1.702
Government Tenants <sup>4</sup>	1.396	1.302	1.542
Commercial Airline Visitor <sup>5</sup>	1.400	1.638	1.605
General Aviation Visitor <sup>6</sup>	1.292	1.572	1.607

Source: Nebraska IMPLAN Input-Output Tables

- 1) Air Transportation multipliers are the weighted average of the Air Transportation and Aircraft Maintenance industries.
- 2) Concessions multipliers are the weighted average of the Food/Drink, Retail and Personal Services industries.
- 3) Construction multipliers are the weighted average of New Government Facility construction and Engineering industries.
- 4) Government multipliers are the weighted average of the New Industrial & Commercial Construction, Maintenance and Repair, and Engineering and Architecture industries.
- 5) Commercial Airline Visitor multipliers are the weighted average of the Hotel, Food/Drink, Retail Trade and Automobile Rental industries.
- 6) General Aviation Visitor multipliers are the weighted average of the Hotel, Food/Drink, Retail Trade and Automobile Rental industries.

Results of the economic impact analysis for this study are presented in tables and grouped by the four airport classifications developed in the NASP. It should be noted that all airports with airline service are in the National classification. Aviation economic activity that pertains to airports with airline service is identified in separate tables.

It should be noted that the two largest airports in the State, Eppley Field in Omaha and Lincoln Municipal, comprise over 90 percent of the State's airport-related economic output.

### **3. STATEWIDE ECONOMIC IMPACT OF AVIATION**

An extensive network of public-use airports is available to accommodate Nebraska's air travel needs. These airports contribute jobs, payroll and output to the economy. Each system airport was surveyed to estimate expenditure and employment levels that affect the economy. Most of the airports have on-airport tenants that are engaged in aviation-related activity whose impacts were included in this analysis. Impacts from air traveler visitors using general aviation and commercial service aircraft were also assessed.

During 2002, it was estimated that there were over 970,000 general aviation aircraft operations at Nebraska's airports. In 2002, there were over 2.1 million airline enplanements at Nebraska's airports. Based upon industry averages and surveys, it was estimated that there were nearly 1.1

million visitors to the State in 2002 that used Nebraska's airline-served airports.

While many of the air traveler visitors to Nebraska use commercial airline airports, a significant number of visitors arrive via private and business general aviation aircraft. It is estimated that over 195,000 visitors (representing nearly 234,100 visitor days) arrived via general aviation aircraft. These visitors create direct jobs and payroll in the State's economy through their expenditures.

## **A. Employment Impacts**

This study's findings indicate that airports in Nebraska are an important source of jobs. Employment, as defined in this analysis, is based on "Full-Time Equivalent" (FTE) estimates where two part-time employees equal one full-time employee. Employment impacts are calculated for both on-airport tenants and visitors.

### **1. Tenant Employment**

**Table 8** lists the total number of jobs generated by on-airport aviation-related tenants at each study airport. The direct jobs comprise those people who are engaged in the provision of aviation services on the airport. In total, there were 4,543 on-airport jobs created directly by the operation of Nebraska's airports in 2002. It is important to note that this employment estimate does not include additional jobs associated with non-aviation businesses, which for various reasons are located on an airport. For instance, some airports have on-site businesses that are not related to airport facilities in any way. Employment of non-aviation businesses is not included in this employment estimate.

Secondary impacts are those jobs that are created by the multiplier effects stemming from the direct jobs associated with Nebraska's airport tenants. For example, an employee of a fuel distributor may owe a portion of his job to an airport since the distributor sells fuel to the airport's FBO. As a result of on-airport tenant activity, additional secondary employment is created. Secondary impacts associated with the day-to-day operation of Nebraska's airports add 2,733 full-time positions to the economy. When direct and secondary employment is considered, Nebraska's airport tenants contributed 7,276 jobs to Nebraska's employment base in 2002. Of this total, over 6,900 jobs are associated with Nebraska's National airports and nearly 300 jobs are associated with Regional, Local and Limited airports.

**TABLE 8**  
**ON-AIRPORT TENANT EMPLOYMENT**

Associated City	Airport Name	First Round Employment	Secondary Employment	Total Employment
<b>National Airports</b>				
Alliance	Alliance Municipal	16	10	26
Chadron	Chadron Municipal Airport	11	7	18
Grand Island	Central Nebraska Regional	113	72	185
Kearney	Kearney Municipal	46	28	74
Lincoln	Lincoln Municipal	2,119	1,302	3,421
McCook	McCook Municipal	16	11	27
Norfolk	Karl Stefan Memorial Airport	18	11	29
North Platte	North Platte Regional/Lee Bird	80	40	119
Omaha	Eppley Field	1,774	1,032	2,807
Scottsbluff	Western Nebraska Regional	41	22	63
Beatrice	Beatrice Municipal	11	6	16
Columbus	Columbus Municipal	46	22	68
Fremont	Fremont Municipal Airport	8	4	12
Hastings	Hastings Municipal	6	3	8
Plattsmouth	Plattsmouth Municipal	5	3	8
Sidney	Sidney Municipal	16	11	27
Valentine	Miller Field	5	3	8
York	York Municipal	6	4	10
<b>National Airports Subtotal</b>		<b>4,334</b>	<b>2,591</b>	<b>6,926</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	2	1	3
Albion	Albion Municipal	0	0	0
Blair	Blair Municipal	0	0	0
Broken Bow	Broken Bow Municipal	7	5	12
Crete	Crete Municipal	5	3	8
Falls City	Brenner Field	2	2	4
Gordon	Gordon Municipal	4	2	6
Holdrege	Brewster Field	15	11	26
Imperial	Imperial Municipal	5	3	8
Kimball	Kimball Municipal	12	8	20
Lexington	Jim Kelly	7	5	11
Nebraska City	Nebraska City Municipal	3	2	5
Neligh	Antelope County	2	1	3
Ogallala	Searle Field	8	4	12
Omaha	Omaha-Millard Field	26	19	44
O'Neill	O'Neill Municipal/John Baker Field	3	2	5
Ord	Evelyn Sharp Field	1	0	1
Seward	Seward Municipal	3	2	5
Superior	Superior Municipal	5	3	8
Wahoo	Wahoo Municipal	3	2	5
Wayne	Wayne Municipal	3	2	5
<b>Regional Airports Subtotal</b>		<b>113</b>	<b>78</b>	<b>191</b>

**TABLE 8 (Cont.)  
ON-AIRPORT TENANT EMPLOYMENT**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Employment</b>	<b>Secondary Employment</b>	<b>Total Employment</b>
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	8	5	13
Auburn	Farington Field	1	0	1
Aurora	Aurora Municipal	10	7	17
Cambridge	Cambridge Municipal	1	1	2
Central City	Central City	13	8	21
Cozad	Cozad Municipal Airport	7	5	12
Creighton	Creighton Municipal	1	0	1
Curtis	Curtis Municipal	2	1	3
David City	David City Municipal	4	2	6
Fairbury	Fairbury Municipal	3	2	4
Fairmont	Fairmont State	1	0	1
Grant	Grant Municipal	6	5	11
Hartington	Hartington Municipal	0	0	0
Hebron	Hebron Municipal	0	0	0
Hyannis	Grant County Airport	1	0	1
Loup City	Loup City Municipal	1	1	2
Minden	Pioneer Village Field	4	2	6
Omaha	Omaha-North	11	8	19
Oshkosh	Garden County Airport	1	1	2
Red Cloud	Red Cloud Municipal	0	0	0
Scribner	Scribner State	1	0	1
South Sioux City	Martin Field	3	1	3
Tekamah	Tekamah	5	3	8
Thedford	Thomas Co.	0	0	0
Wallace	Wallace Municipal	0	0	0
<b>Local Airports Subtotal</b>		<b>79</b>	<b>53</b>	<b>132</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	17	10	27
<b>Limited Airports Subtotal</b>		<b>17</b>	<b>10</b>	<b>27</b>
<b>Total</b>		<b>4,543</b>	<b>2,733</b>	<b>7,276</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

## 2. Commercial Airline Visitor Employment

Visitors to the State arriving via a commercial airline airport typically spend money, thereby helping to support additional employment. **Table 9** identifies the number of Nebraska employees supported by visitors arriving by airlines at the 10 commercial airline airports. As previously discussed, it is possible to calculate the number of visitors and, subsequently, the number of jobs supported by these visitors. These direct jobs are attributed to a variety of sectors, however, the majority of these jobs are in the hotel/motel, restaurant, recreational and entertainment, and retail sectors. As a result of calendar year 2002 commercial airline visitor expenditures, there were over 14,300 full-time positions supported in the State.

Secondary impacts include those jobs that exist due to continued circulation of commercial airline visitor expenditures within the Nebraska economy. Secondary impacts resulted in over 5,700 additional full-time positions supported by the spending of commercial airline visitors. When calendar year 2002 direct and secondary visitor-related employment impacts are combined, nearly 20,100 jobs can be attributed to commercial airline visitors to Nebraska.

**TABLE 9**  
**COMMERCIAL AIRLINE VISITOR-RELATED EMPLOYMENT**

Associated City	Airport Name	First Round Employment	Secondary Employment	Total Employment
<b>Commercial Airline Airports</b>				
Alliance	Alliance Municipal	6	2	8
Chadron	Chadron Municipal Airport	7	3	10
Grand Island	Central Nebraska Regional	36	14	50
Kearney	Kearney Municipal	33	13	46
Lincoln	Lincoln Municipal	1,544	618	2,162
McCook	McCook Municipal	12	5	17
Norfolk	Karl Stefan Memorial Airport	8	3	11
North Platte	North Platte Regional/Lee Bird	38	15	53
Omaha	Eppley Field	12,605	5,047	17,652
Scottsbluff	Western Nebraska Regional	57	23	80
<b>Total</b>		<b>14,346</b>	<b>5,743</b>	<b>20,089</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

## 3. General Aviation Visitor Employment

Similar to visitors using airline service, intra- and inter-state visitors using general aviation aircraft typically spend money when visiting another area, thereby helping to support additional employment. **Table 10** identifies the number of Nebraska employees supported by visitors arriving by general aviation aircraft. As previously discussed, it is possible to calculate the number of visitors and, subsequently, the number of jobs supported by these visitors. These direct jobs are attributed to a variety of sectors; however, the majority of these jobs are in the hotel/motel, restaurant, recreational and entertainment, and retail sectors. As a result of calendar year 2002 general aviation visitor expenditures, there were approximately 405 additional full-time positions supported in Nebraska.

**TABLE 10**  
**GENERAL AVIATION VISITOR-RELATED EMPLOYMENT**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Employment</b>	<b>Secondary Employment</b>	<b>Total Employment</b>
<b>National Airports</b>				
Alliance	Alliance Municipal	7	2	9
Beatrice	Beatrice Municipal	5	2	7
Chadron	Chadron Municipal Airport	2	1	3
Columbus	Columbus Municipal	10	3	13
Fremont	Fremont Municipal Airport	7	2	9
Grand Island	Central Nebraska Regional	8	2	10
Hastings	Hastings Municipal	11	3	15
Kearney	Kearney Municipal	19	6	25
Lincoln	Lincoln Municipal	47	14	60
McCook	McCook Municipal	10	3	13
Norfolk	Karl Stefan Memorial Airport	12	4	16
North Platte	North Platte Regional/Lee Bird	20	6	26
Omaha	Eppley Field	47	14	61
Plattsmouth	Plattsmouth Municipal	11	3	14
Scottsbluff	Western Nebraska Regional	15	4	19
Sidney	Sidney Municipal	18	5	24
Valentine	Miller Field	1	0	1
York	York Municipal	4	1	5
<b>National Airports Subtotal</b>		<b>253</b>	<b>74</b>	<b>327</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	3	1	4
Albion	Albion Municipal	1	0	1
Blair	Blair Municipal	1	0	1
Broken Bow	Broken Bow Municipal	1	0	2
Crete	Crete Municipal	3	1	3
Falls City	Brenner Field	3	1	4
Gordon	Gordon Municipal	2	1	3
Holdrege	Brewster Field	3	1	4
Imperial	Imperial Municipal	1	0	2
Kimball	Kimball Municipal	2	1	2
Lexington	Jim Kelly	2	1	3
Nebraska City	Nebraska City Municipal	2	0	2
Neligh	Antelope County	3	1	3
Ogallala	Searle Field	3	1	4
Omaha	Omaha-Millard Field	36	11	47
O'Neill	O'Neill Municipal/John Baker Field	4	1	5
Ord	Evelyn Sharp Field	3	1	3
Seward	Seward Municipal	4	1	5
Superior	Superior Municipal	1	0	1
Wahoo	Wahoo Municipal	3	1	4
Wayne	Wayne Municipal	1	0	1
<b>Regional Airports Subtotal</b>		<b>81</b>	<b>24</b>	<b>105</b>

**TABLE 10**  
**GENERAL AVIATION VISITOR-RELATED EMPLOYMENT**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Employment</b>	<b>Secondary Employment</b>	<b>Total Employment</b>
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	1	0	1
Auburn	Farington Field	1	0	1
Aurora	Aurora Municipal	5	2	7
Cambridge	Cambridge Municipal	1	0	2
Central City	Central City	2	1	3
Cozad	Cozad Municipal Airport	3	1	3
Creighton	Creighton Municipal	0	0	0
Curtis	Curtis Municipal	1	0	1
David City	David City Municipal	1	0	1
Fairbury	Fairbury Municipal	1	0	1
Fairmont	Fairmont State	0	0	0
Grant	Grant Municipal	1	0	1
Hartington	Hartington Municipal	1	0	1
Hebron	Hebron Municipal	1	0	1
Hyannis	Grant County Airport	0	0	0
Loup City	Loup City Municipal	0	0	1
Minden	Pioneer Village Field	3	1	4
Omaha	Omaha-North	1	0	2
Oshkosh	Garden County Airport	3	1	3
Red Cloud	Red Cloud Municipal	0	0	1
Scribner	Scribner State	1	0	1
South Sioux City	Martin Field	8	2	10
Tekamah	Tekamah	9	3	12
Theford	Thomas Co.	0	0	0
Wallace	Wallace Municipal	13	4	17
<b>Local Airports Subtotal</b>		<b>56</b>	<b>17</b>	<b>73</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	15	4	19
<b>Subtotal</b>		<b>15</b>	<b>4</b>	<b>19</b>
<b>Total</b>		<b>405</b>	<b>119</b>	<b>524</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

Secondary impacts include those jobs that exist due to continued circulation of visitor expenditures within the Nebraska economy. Secondary impacts resulted in 119 additional full-time positions. When calendar year 2002 direct and secondary visitor-related employment impacts are combined, approximately 524 jobs can be attributed to visitors using general aviation in Nebraska. Of this total, 327 jobs are associated with Nebraska's National airports and 197 jobs are associated with Regional, Local, and Limited airports.

#### **4. Total Employment**

**Table 11** identifies the total number of employees whose jobs are directly related to activities at the airports in the State. As a result of on-airport tenants and visitors using airline service and general aviation airports, there are over 19,300 employees directly related to Nebraska's system of airports. The multiplier effect added nearly 8,600 additional jobs. In total, 27,900 jobs are attributable to Nebraska's airports. Of this total, over 27,300 jobs are attributable to the State's National airports and almost 550 jobs to Regional, Local, and Limited airports.

**TABLE 11**  
**TOTAL EMPLOYMENT**

Associated City	Airport Name	First Round Employment	Secondary Employment	Total Employment
<b>National Airports</b>				
Alliance	Alliance Municipal	29	15	44
Chadron	Chadron Municipal Airport	20	11	31
Grand Island	Central Nebraska Regional	157	88	245
Kearney	Kearney Municipal	98	47	144
Lincoln	Lincoln Municipal	3,710	1,934	5,643
McCook	McCook Municipal	38	18	56
Norfolk	Karl Stefan Memorial Airport	38	18	57
North Platte	North Platte Regional/Lee Bird	138	61	199
Omaha	Eppley Field	14,426	6,093	20,519
Scottsbluff	Western Nebraska Regional	113	49	161
Beatrice	Beatrice Municipal	16	7	23
Columbus	Columbus Municipal	56	25	81
Fremont	Fremont Municipal Airport	15	6	20
Hastings	Hastings Municipal	17	6	23
Plattsmouth	Plattsmouth Municipal	15	6	22
Sidney	Sidney Municipal	34	17	51
Valentine	Miller Field	6	4	9
York	York Municipal	10	5	15
<b>National Airports Subtotal</b>		<b>18,934</b>	<b>8,409</b>	<b>27,343</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	5	2	6
Albion	Albion Municipal	1	0	1
Blair	Blair Municipal	1	0	1
Broken Bow	Broken Bow Municipal	8	6	14
Crete	Crete Municipal	7	4	11
Falls City	Brenner Field	5	2	7
Gordon	Gordon Municipal	6	3	9
Holdrege	Brewster Field	18	12	30
Imperial	Imperial Municipal	6	4	10
Kimball	Kimball Municipal	13	9	22
Lexington	Jim Kelly	9	5	14
Nebraska City	Nebraska City Municipal	4	2	6
Neligh	Antelope County	5	2	7
Ogallala	Searle Field	11	5	16
Omaha	Omaha-Millard Field	62	29	91
O'Neill	O'Neill Municipal/John Baker Field	7	3	10
Ord	Evelyn Sharp Field	4	1	5
Seward	Seward Municipal	7	3	10
Superior	Superior Municipal	5	4	9
Wahoo	Wahoo Municipal	6	3	10
Wayne	Wayne Municipal	4	3	7
<b>Regional Airports Subtotal</b>		<b>193</b>	<b>102</b>	<b>295</b>

**TABLE 11 (Cont.)  
TOTAL EMPLOYMENT**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Employment</b>	<b>Secondary Employment</b>	<b>Total Employment</b>
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	9	5	14
Auburn	Farington Field	1	0	2
Aurora	Aurora Municipal	15	9	24
Cambridge	Cambridge Municipal	2	1	4
Central City	Central City	14	9	23
Cozad	Cozad Municipal Airport	10	6	15
Creighton	Creighton Municipal	1	0	2
Curtis	Curtis Municipal	2	1	3
David City	David City Municipal	4	2	6
Fairbury	Fairbury Municipal	3	2	5
Fairmont	Fairmont State	1	0	2
Grant	Grant Municipal	7	5	12
Hartington	Hartington Municipal	1	0	1
Hebron	Hebron Municipal	1	0	1
Hyannis	Grant County Airport	1	0	1
Loup City	Loup City Municipal	1	1	2
Minden	Pioneer Village Field	7	3	10
Omaha	Omaha-North	12	8	21
Oshkosh	Garden County Airport	4	1	5
Red Cloud	Red Cloud Municipal	0	0	1
Scribner	Scribner State	2	1	2
South Sioux City	Martin Field	10	3	13
Tekamah	Tekamah	13	6	19
Thedford	Thomas Co.	0	0	0
Wallace	Wallace Municipal	13	4	17
<b>Local Airports Subtotal</b>		<b>135</b>	<b>70</b>	<b>205</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	32	14	46
<b>Limited Airports Subtotal</b>		<b>32</b>	<b>14</b>	<b>46</b>
<b>Total</b>		<b>19,293</b>	<b>8,595</b>	<b>27,888</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

## **B. Payroll Impacts**

Employment supported by tenants on, and visitors to, Nebraska's airports results in payroll expenditures being introduced in the statewide economy. Payroll impacts related to the previously identified employment benefits were calculated for on-airport tenants, commercial airline visitors, and general aviation visitors using the airports in Nebraska.

### **1. Tenant Payroll**

**Table 12** identifies the payroll associated with tenants at each of Nebraska's airports. In 2002, total direct statewide payroll impacts were nearly \$167.3 million. This direct spending ripples throughout the economy creating secondary payroll impacts that can be measured through the use of the IMPLAN model. As in the previous example, a fuel distributor employee owes a portion of his payroll to the sale of fuel at the local airport. This secondary payroll impact related to tenants at

**TABLE 12**  
**ON-AIRPORT TENANT PAYROLL**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Payroll</b>	<b>Secondary Payroll</b>	<b>Total Payroll</b>
<b>National Airports</b>				
Alliance	Alliance Municipal	\$432,800	\$187,400	\$620,200
Beatrice	Beatrice Municipal	\$252,100	\$100,300	\$352,400
Chadron	Chadron Municipal Airport	\$286,400	\$125,400	\$411,800
Columbus	Columbus Municipal	\$2,494,100	\$877,500	\$3,371,600
Fremont	Fremont Municipal Airport	\$209,700	\$79,200	\$288,900
Grand Island	Central Nebraska Regional	\$3,752,500	\$1,675,700	\$5,428,200
Hastings	Hastings Municipal	\$59,700	\$25,600	\$85,300
Kearney	Kearney Municipal	\$1,373,200	\$595,600	\$1,968,800
Lincoln	Lincoln Municipal	\$90,063,900	\$39,431,500	\$129,495,400
McCook	McCook Municipal	\$535,000	\$245,900	\$780,900
Norfolk	Karl Stefan Memorial Airport	\$501,600	\$210,500	\$712,100
North Platte	North Platte Regional/Lee Bird	\$3,049,700	\$1,214,800	\$4,264,500
Omaha	Eppley Field	\$57,272,400	\$26,751,000	\$84,023,400
Plattsmouth	Plattsmouth Municipal	--Confidential--		
Scottsbluff	Western Nebraska Regional	\$1,291,900	\$535,700	\$1,827,600
Sidney	Sidney Municipal	\$462,800	\$233,800	\$696,600
Valentine	Valentine/Miller Field	\$98,100	\$49,900	\$148,000
York	York Municipal	\$149,600	\$64,200	\$213,800
<b>National Airports Subtotal</b>		<b>\$162,375,800</b>	<b>\$72,450,300</b>	<b>\$234,826,100</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	\$36,000	\$10,900	\$46,900
Albion	Albion Municipal	\$0	\$0	\$0
Blair	Blair Municipal	\$0	\$0	\$0
Broken Bow	Broken Bow Municipal	\$178,200	\$91,400	\$269,600
Crete	Crete Municipal	\$65,800	\$33,700	\$99,500
Falls City	Falls City/ Brenner Field	--Confidential--		
Gordon	Gordon Municipal	\$89,800	\$43,800	\$133,600
Holdrege	Brewster Field	\$358,200	\$178,600	\$536,800
Imperial	Imperial Municipal	\$115,000	\$59,000	\$174,000
Kimball	Kimball Municipal	\$298,900	\$152,100	\$451,000
Lexington	Lexington/Jim Kelly	\$179,500	\$87,500	\$267,000
Nebraska City	Nebraska City Municipal	--Confidential--		
Neligh	Neligh/Antelope Co.	\$55,800	\$22,100	\$77,900
Ogallala	Searle Field	\$377,000	\$118,100	\$495,100
Omaha	Omaha-Millard Field	\$533,200	\$260,600	\$793,800
O'Neill	O'Neill Municipal/John Baker Field	\$92,200	\$40,800	\$133,000
Ord	Ord/Evelyn Sharp Field	\$23,000	\$7,000	\$30,000
Seward	Seward Municipal	--Confidential--		
Superior	Superior Municipal	\$63,500	\$32,600	\$96,100
Wahoo	Wahoo Municipal	\$71,200	\$36,500	\$107,700
Wayne	Wayne Municipal	--Confidential--		
<b>Regional Airports Subtotal</b>		<b>\$2,675,800</b>	<b>\$1,243,700</b>	<b>\$3,919,500</b>

**TABLE 12  
ON-AIRPORT TENANT PAYROLL**

Associated City	Airport Name	First Round Payroll	Secondary Payroll	Total Payroll
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	\$246,400	\$116,600	\$363,000
Auburn	Farington Field	\$2,500	\$700	\$3,200
Aurora	Aurora Municipal	\$242,200	\$118,200	\$360,400
Cambridge	Cambridge Municipal	--Confidential--		
Central City	Central City	\$196,000	\$93,000	\$289,000
Cozad	Cozad Municipal Airport	\$205,000	\$101,900	\$306,900
Creighton	Creighton Municipal	\$2,000	\$600	\$2,600
Curtis	Curtis Municipal	--Confidential--		
David City	David City Municipal	\$82,500	\$40,800	\$123,300
Fairbury	Fairbury Municipal	--Confidential--		
Fairmont	Fairmont State	\$28,900	\$8,700	\$37,600
Grant	Grant Municipal	\$161,600	\$82,900	\$244,500
Hartington	Hartington Municipal	\$0	\$0	\$0
Hebron	Hebron Municipal	\$0	\$0	\$0
Hyannis	Hyannis/Grant County Airport	\$200	\$100	\$300
Loup City	Loup City Municipal	--Confidential--		
Minden	Pioneer Village Field	\$92,100	\$43,900	\$136,000
Omaha	Omaha-North	\$271,400	\$132,700	\$404,100
Oshkosh	Oshkosh/Garden County Airport	\$28,200	\$11,100	\$39,300
Red Cloud	Red Cloud Municipal	\$0	\$0	\$0
Scribner	Scribner State	\$30,200	\$9,100	\$39,300
South Sioux City	Martin Field	--Confidential--		
Tekamah	Tekamah	\$74,100	\$37,900	\$112,000
Thedford	Thedford/Thomas Co.	\$0	\$0	\$0
Wallace	Wallace Municipal	\$0	\$0	\$0
<b>Local Airports</b>		<b>\$1,860,600</b>	<b>\$881,100</b>	<b>\$2,741,600</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	\$362,000	\$150,800	\$512,800
<b>Subtotal</b>		<b>\$362,000</b>	<b>\$150,800</b>	<b>\$512,800</b>
<b>Total</b>		<b>\$167,274,200</b>	<b>\$74,725,900</b>	<b>\$242,000,000</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

Nebraska's system of airports was estimated at approximately \$74.7 million. Total payroll for airport tenants, which includes direct and secondary payroll, was over \$242 million in 2002. Of this total, over \$234.8 million was attributable to National-category airports. Tenant payroll associated with Regional, Local, and Limited airports was about \$7.2 million. It should be noted that several general aviation airports had only one aviation-related tenant and no government activity. In order to preserve tenant confidentiality, total tenant and visitor impacts at these airports have been combined.

## 2. Commercial Airline Visitor Related Payroll

**Table 13** identifies the payroll attributable to visitors using Nebraska's commercial airline airports. Direct payroll is money paid to employees working at the restaurants, hotels/motels, retail businesses, and other service industries that are patronized by commercial airline visitors. The direct statewide payroll attributable to commercial airline visitors was estimated at nearly \$239.8

million in 2002. Businesses that supply and service these visitor-related industries owe a portion of their employees' payroll to the service industries. As employees in the service industries spend their payroll, the monies continue to circulate, generating additional employment and subsequent payroll. Secondary payroll impacts associated with commercial airline visitor-supported payroll were estimated at over \$152.9 million. When 2002 direct and secondary payroll impacts stemming from commercial airline visitors are combined, a total payroll impact of over \$392.7 million is produced.

**TABLE 13**  
**Nebraska Economic Impact Study**  
**COMMERCIAL AIRLINE VISITOR-RELATED PAYROLL**

Associated City	Airport Name	First Round Payroll	Secondary Payroll	Total Payroll
<b>Commercial Airports</b>				
Alliance	Alliance Municipal	\$100,200	\$63,900	\$164,100
Chadron	Chadron Municipal Airport	\$116,900	\$74,600	\$191,500
Grand Island	Central Nebraska Regional	\$601,200	\$383,600	\$984,800
Kearney	Kearney Municipal	\$551,100	\$351,700	\$902,800
Lincoln	Lincoln Municipal	\$25,784,800	\$16,453,100	\$42,237,900
McCook	McCook Municipal	\$200,400	\$80,200	\$280,600
Norfolk	Karl Stefan Memorial Airport	\$133,600	\$85,200	\$218,800
North Platte	North Platte Regional/Lee Bird	\$634,600	\$404,900	\$1,039,500
Omaha	Eppeley Field	\$210,503,500	\$134,320,900	\$344,824,400
Scottsbluff	Western Nebraska Regional	\$1,149,715	\$733,585	\$1,883,300
<b>Total</b>		<b>\$239,776,015</b>	<b>\$152,951,685</b>	<b>\$392,727,700</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

### 3. *General Aviation Visitor Related Payroll*

**Table 14** identifies the payroll attributable to visitors arriving at Nebraska's airports via general aviation aircraft. Direct payroll includes salary and benefits paid to employees working at visitor-related businesses and other service industries that are utilized by general aviation visitors. The direct statewide payroll attributable to general aviation visitors was estimated at \$6.76 million in 2002. As employees of the visitor-related industries spend their payroll, the monies continue to circulate generating additional employment and subsequent payroll. Secondary payroll impacts associated with general aviation visitors were estimated at over \$3.82 million. When 2002 direct and secondary payroll impacts stemming from general aviation visitors were combined, a total payroll impact of \$10.6 million is produced. Of this total general aviation visitor-related payroll, \$6.60 million is associated with National-category airports and \$3.98 million with Regional, Local, and Limited airports.

### 4. *Total Payroll*

The total impact of the combined on-airport tenant, commercial airline visitor, and general aviation visitor-related payroll is identified in **Table 15**. When all direct impacts were combined for 2002, Nebraska's airport system was responsible for generating \$413.8 million in payroll. With nearly \$231.5 million in secondary payroll benefits, a total of over \$645.3 million in annual payroll was created in Nebraska as a result of visitor spending and tenants at general aviation and airports with

airline service. Of this total, almost \$634.2 million was associated with Nebraska's National airports and nearly \$11.2 million with Regional, Local, and Limited airports.

**TABLE 14**  
**GENERAL AVIATION VISITOR-RELATED PAYROLL**

Associated City	Airport Name	First Round Payroll	Secondary Payroll	Total Payroll
<b>National Airports</b>				
Alliance	Alliance Municipal	\$111,900	\$64,000	\$175,900
Beatrice	Beatrice Municipal	\$88,500	\$50,600	\$139,100
Chadron	Chadron Municipal Airport	\$36,700	\$21,000	\$57,700
Columbus	Columbus Municipal	\$167,000	\$95,500	\$262,500
Fremont	Fremont Municipal Airport	\$115,200	\$65,900	\$181,100
Grand Island	Central Nebraska Regional	\$128,600	\$73,500	\$202,100
Hastings	Hastings Municipal	\$187,000	\$106,900	\$293,900
Kearney	Kearney Municipal	\$319,000	\$182,400	\$501,400
Lincoln	Lincoln Municipal	\$776,600	\$444,000	\$1,220,600
McCook	McCook Municipal	\$167,000	\$48,400	\$215,400
Norfolk	Karl Stefan Memorial Airport	\$205,400	\$117,400	\$322,800
North Platte	North Platte Regional/Lee Bird	\$335,700	\$191,900	\$527,600
Omaha	Eppley Field	\$783,200	\$447,700	\$1,230,900
Plattsmouth	Plattsmouth Municipal	\$177,000	\$101,200	\$278,200
Scottsbluff	Western Nebraska Regional	\$242,200	\$138,500	\$380,700
Sidney	Sidney Municipal	\$307,300	\$175,700	\$483,000
Valentine	Miller Field	\$18,400	\$10,500	\$28,900
York	York Municipal	\$65,100	\$37,200	\$102,300
<b>National Airports Subtotal</b>		<b>\$4,231,800</b>	<b>\$2,372,300</b>	<b>\$6,604,100</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	\$46,800	\$26,800	\$73,600
Albion	Albion Municipal	\$18,400	\$10,500	\$28,900
Blair	Blair Municipal	\$16,700	\$9,500	\$26,200
Broken Bow	Broken Bow Municipal	\$20,000	\$11,400	\$31,400
Crete	Crete Municipal	\$41,800	\$23,900	\$65,700
Falls City	Brenner Field	\$50,100	\$28,600	\$78,700
Gordon	Gordon Municipal	\$36,700	\$21,000	\$57,700
Holdrege	Brewster Field	\$50,100	\$28,600	\$78,700
Imperial	Imperial Municipal	\$21,700	\$12,400	\$34,100
Kimball	Kimball Municipal	\$30,100	\$17,200	\$47,300
Lexington	Jim Kelly	\$36,700	\$21,000	\$57,700
Nebraska City	Nebraska City Municipal	\$25,100	\$14,300	\$39,400
Neligh	Antelope County	\$43,400	\$24,800	\$68,200
Ogallala	Searle Field	\$56,800	\$32,500	\$89,300
Omaha	Omaha-Millard Field	\$602,900	\$344,700	\$947,600
O'Neill	O'Neill Municipal/John Baker Field	\$66,800	\$38,200	\$105,000
Ord	Evelyn Sharp Field	\$43,400	\$24,800	\$68,200
Seward	Seward Municipal	\$60,100	\$34,400	\$94,500
Superior	Superior Municipal	\$10,000	\$5,700	\$15,700
Wahoo	Wahoo Municipal	\$55,100	\$31,500	\$86,600
Wayne	Wayne Municipal	\$18,400	\$10,500	\$28,900
<b>Regional Airports Subtotal</b>		<b>\$1,351,100</b>	<b>\$772,300</b>	<b>\$2,123,400</b>

**TABLE 14 (Cont.)**  
**GENERAL AVIATION VISITOR-RELATED PAYROLL**

Associated City	Airport Name	First Round Payroll	Secondary Payroll	Total Payroll
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	\$18,400	\$10,500	\$28,900
Auburn	Farington Field	\$15,000	\$8,600	\$23,600
Aurora	Aurora Municipal	\$88,500	\$50,600	\$139,100
Cambridge	Cambridge Municipal	\$23,400	\$13,400	\$36,800
Central City	Central City	\$31,700	\$18,100	\$49,800
Cozad	Cozad Municipal Airport	\$43,400	\$24,800	\$68,200
Creighton	Creighton Municipal	\$3,300	\$1,900	\$5,200
Curtis	Curtis Municipal	\$10,000	\$5,700	\$15,700
David City	David City Municipal	\$10,000	\$5,700	\$15,700
Fairbury	Fairbury Municipal	\$10,000	\$5,700	\$15,700
Fairmont	Fairmont State	\$3,300	\$1,900	\$5,200
Grant	Grant Municipal	\$15,000	\$8,600	\$23,600
Hartington	Hartington Municipal	\$15,000	\$8,600	\$23,600
Hebron	Hebron Municipal	\$11,700	\$6,700	\$18,400
Hyannis	Grant County Airport	\$1,700	\$1,000	\$2,700
Loup City	Loup City Municipal	\$6,700	\$3,800	\$10,500
Minden	Pioneer Village Field	\$50,100	\$28,600	\$78,700
Omaha	Omaha-North	\$23,400	\$13,400	\$36,800
Oshkosh	Garden County Airport	\$43,400	\$24,800	\$68,200
Red Cloud	Red Cloud Municipal	\$6,700	\$3,800	\$10,500
Scribner	Scribner State	\$10,000	\$5,700	\$15,700
South Sioux City	Martin Field	\$128,600	\$73,500	\$202,100
Tekamah	Tekamah	\$148,600	\$84,900	\$233,500
Thedford	Thomas Co.	\$1,700	\$1,000	\$2,700
Wallace	Wallace Municipal	\$215,400	\$123,100	\$338,500
<b>Local Airports Subtotal</b>		<b>\$935,000</b>	<b>\$534,400</b>	<b>\$1,469,400</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	\$245,500	\$140,300	\$385,800
<b>Limited Airports Subtotal</b>		<b>\$245,500</b>	<b>\$140,300</b>	<b>\$385,800</b>
<b>Total</b>		<b>\$6,763,400</b>	<b>\$3,819,300</b>	<b>\$10,582,700</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

**TABLE 15  
TOTAL PAYROLL**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Payroll</b>	<b>Secondary Payroll</b>	<b>Total Payroll</b>
<b>National Airports</b>				
Alliance	Alliance Municipal	\$644,900	\$315,300	\$960,200
Beatrice	Beatrice Municipal	\$340,600	\$150,900	\$491,500
Chadron	Chadron Municipal Airport	\$440,000	\$221,000	\$661,000
Columbus	Columbus Municipal	\$2,661,100	\$973,000	\$3,634,100
Fremont	Fremont Municipal Airport	\$324,900	\$145,100	\$470,000
Grand Island	Central Nebraska Regional	\$4,482,300	\$2,132,800	\$6,615,100
Hastings	Hastings Municipal	\$246,700	\$132,500	\$379,200
Kearney	Kearney Municipal	\$2,243,300	\$1,129,700	\$3,373,000
Lincoln	Lincoln Municipal	\$116,625,300	\$56,328,600	\$172,953,900
McCook	McCook Municipal	\$902,400	\$374,500	\$1,276,900
Norfolk	Karl Stefan Memorial Airport	\$840,600	\$413,100	\$1,253,700
North Platte	North Platte Regional/Lee Bird	\$4,020,000	\$1,811,600	\$5,831,600
Omaha	Eppley Field	\$268,559,100	\$161,519,600	\$430,078,700
Plattsmouth	Plattsmouth Municipal	\$267,300	\$147,500	\$414,800
Scottsbluff	Western Nebraska Regional	\$2,683,815	\$1,407,785	\$4,091,600
Sidney	Sidney Municipal	\$770,100	\$409,500	\$1,179,600
Valentine	Miller Field	\$116,500	\$60,400	\$176,900
York	York Municipal	\$214,700	\$101,400	\$316,100
<b>National Airports Subtotal</b>		<b>\$406,383,615</b>	<b>\$227,774,285</b>	<b>\$634,157,900</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	\$82,800	\$37,700	\$120,500
Albion	Albion Municipal	\$18,400	\$10,500	\$28,900
Blair	Blair Municipal	\$16,700	\$9,500	\$26,200
Broken Bow	Broken Bow Municipal	\$198,200	\$102,800	\$301,000
Crete	Crete Municipal	\$107,600	\$57,600	\$165,200
Falls City	Brenner Field	\$58,200	\$32,800	\$91,000
Gordon	Gordon Municipal	\$126,500	\$64,800	\$191,300
Holdrege	Brewster Field	\$408,300	\$207,200	\$615,500
Imperial	Imperial Municipal	\$136,700	\$71,400	\$208,100
Kimball	Kimball Municipal	\$329,000	\$169,300	\$498,300
Lexington	Jim Kelly	\$216,200	\$108,500	\$324,700
Nebraska City	Nebraska City Municipal	\$35,100	\$17,300	\$52,400
Neligh	Antelope County	\$99,200	\$46,900	\$146,100
Ogallala	Searle Field	\$433,800	\$150,600	\$584,400
Omaha	Omaha-Millard Field	\$1,136,100	\$605,300	\$1,741,400
O'Neill	O'Neill Municipal/John Baker Field	\$159,000	\$79,000	\$238,000
Ord	Evelyn Sharp Field	\$66,400	\$31,800	\$98,200
Seward	Seward Municipal	\$120,300	\$65,300	\$185,600
Superior	Superior Municipal	\$73,500	\$38,300	\$111,800
Wahoo	Wahoo Municipal	\$126,300	\$68,000	\$194,300
Wayne	Wayne Municipal	\$78,600	\$41,400	\$120,000
<b>Regional Airports Subtotal</b>		<b>\$4,026,900</b>	<b>\$2,016,000</b>	<b>\$6,042,900</b>

**TABLE 15 (Cont.)**  
**TOTAL PAYROLL**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Payroll</b>	<b>Secondary Payroll</b>	<b>Total Payroll</b>
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	\$264,800	\$127,100	\$391,900
Auburn	Farington Field	\$17,500	\$9,300	\$26,800
Aurora	Aurora Municipal	\$330,700	\$168,800	\$499,500
Cambridge	Cambridge Municipal	\$49,000	\$26,500	\$75,500
Central City	Central City	\$227,700	\$111,100	\$338,800
Cozad	Cozad Municipal Airport	\$248,400	\$126,700	\$375,100
Creighton	Creighton Municipal	\$5,300	\$2,500	\$7,800
Curtis	Curtis Municipal	\$46,000	\$24,200	\$70,200
David City	David City Municipal	\$92,500	\$46,500	\$139,000
Fairbury	Fairbury Municipal	\$58,600	\$30,600	\$89,200
Fairmont	Fairmont State	\$32,200	\$10,600	\$42,800
Grant	Grant Municipal	\$176,600	\$91,500	\$268,100
Hartington	Hartington Municipal	\$15,000	\$8,600	\$23,600
Hebron	Hebron Municipal	\$11,700	\$6,700	\$18,400
Hyannis	Grant County Airport	\$1,900	\$1,100	\$3,000
Loup City	Loup City Municipal	\$28,000	\$10,300	\$38,200
Minden	Pioneer Village Field	\$142,200	\$72,500	\$214,700
Omaha	Omaha-North	\$294,800	\$146,100	\$440,900
Oshkosh	Garden County Airport	\$71,600	\$35,900	\$107,500
Red Cloud	Red Cloud Municipal	\$6,700	\$3,800	\$10,500
Scribner	Scribner State	\$40,200	\$14,800	\$55,000
South Sioux City	Martin Field	\$194,400	\$93,400	\$287,800
Tekamah	Tekamah	\$222,700	\$122,800	\$345,500
Thedford	Thomas Co.	\$1,700	\$1,000	\$2,700
Wallace	Wallace Municipal	\$215,400	\$123,100	\$338,500
<b>Local Airports Subtotal</b>		<b>\$2,795,600</b>	<b>\$1,415,500</b>	<b>\$4,211,000</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	\$607,500	\$291,100	\$898,600
<b>Limited Airports Subtotal</b>		<b>\$607,500</b>	<b>\$291,100</b>	<b>\$898,600</b>
<b>Total</b>		<b>\$413,813,615</b>	<b>\$231,496,885</b>	<b>\$645,310,400</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

## C. Output Impacts

Output or economic activity is defined as annual gross sales and average annual capital expenditures for on-airport tenants. One exception is government and airline tenants located on the airports. Government and airline output is defined as the sum of annual capital expenditures, payroll, and operating expenses. Output related to commercial airline and general aviation visitors is defined as expenditures made during their visits. These visitor-related expenditures are typically in the hotel/motel, restaurant, transportation, and retail sectors. Output impacts for airport tenants and visitors are discussed below.

### 1. Tenant Output

**Table 16** identifies the direct, secondary and total tenant output for each of the airports in the State. As aviation-related businesses and government tenants located on each airport expend

**TABLE 16  
ON-AIRPORT TENANT OUTPUT**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Output</b>	<b>Secondary Output</b>	<b>Total Output</b>
<b>National Airports</b>				
Alliance	Alliance Municipal	\$2,016,800	\$830,400	\$2,847,200
Beatrice	Beatrice Municipal	\$1,129,900	\$500,100	\$1,630,000
Chadron	Chadron Municipal Airport	\$825,000	\$336,300	\$1,161,300
Columbus	Columbus Municipal	\$6,824,400	\$2,433,900	\$9,258,300
Fremont	Fremont Municipal Airport	\$3,563,700	\$1,708,700	\$5,272,400
Grand Island	Central Nebraska Regional	\$12,804,800	\$5,928,200	\$18,733,000
Hastings	Hastings Municipal	\$184,000	\$67,800	\$251,800
Kearney	Kearney Municipal	\$4,936,500	\$2,287,600	\$7,224,100
Lincoln	Lincoln Municipal	\$266,237,000	\$124,561,900	\$390,798,900
McCook	McCook Municipal	\$5,281,600	\$2,607,800	\$7,889,400
Norfolk	Karl Stefan Memorial Airport	\$1,914,800	\$848,400	\$2,763,200
North Platte	North Platte Regional/Lee Bird	\$8,284,600	\$3,365,200	\$11,649,800
Omaha	Eppley Field	\$258,406,700	\$129,020,800	\$387,427,500
Plattsmouth	Plattsmouth Municipal	--Confidential--		
Scottsbluff	Western Nebraska Regional	\$4,793,400	\$2,122,900	\$6,916,300
Sidney	Sidney Municipal	\$1,710,200	\$850,200	\$2,560,400
Valentine	Miller Field	\$493,500	\$225,000	\$718,500
York	York Municipal	\$705,600	\$308,600	\$1,014,200
<b>National Airports Subtotal</b>		<b>\$580,565,700</b>	<b>\$278,236,200</b>	<b>\$858,801,900</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	\$186,000	\$56,200	\$242,200
Albion	Albion Municipal	\$0	\$0	\$0
Blair	Blair Municipal	\$144,100	\$43,500	\$187,600
Broken Bow	Broken Bow Municipal	\$1,478,000	\$757,900	\$2,235,900
Crete	Crete Municipal	\$461,900	\$217,300	\$679,200
Falls City	Brenner Field	--Confidential--		
Gordon	Gordon Municipal	\$302,000	\$143,600	\$445,600
Holdrege	Brewster Field	\$3,313,900	\$1,685,400	\$4,999,300
Imperial	Imperial Municipal	\$1,379,600	\$702,800	\$2,082,400
Kimball	Kimball Municipal	\$1,375,700	\$697,900	\$2,073,600
Lexington	Jim Kelly	\$1,529,700	\$756,400	\$2,286,100
Nebraska City	Nebraska City Municipal	--Confidential--		
Neligh	Antelope County	\$393,100	\$184,600	\$577,700
Ogallala	Searle Field	\$1,046,400	\$337,500	\$1,383,900
Omaha	Omaha-Millard Field	\$2,526,000	\$1,261,800	\$3,787,800
O'Neill	O'Neill Municipal/John Baker Field	\$765,500	\$375,800	\$1,141,300
Ord	Evelyn Sharp Field	\$2,400	\$800	\$3,200
Seward	Seward Municipal	--Confidential--		
Superior	Superior Municipal	\$2,156,700	\$1,104,700	\$3,261,400
Wahoo	Wahoo Municipal	\$704,100	\$361,100	\$1,065,200
Wayne	Wayne Municipal	--Confidential--		
<b>Regional Airports Subtotal</b>		<b>\$19,451,000</b>	<b>\$9,466,400</b>	<b>\$28,917,400</b>

**TABLE 16 (Cont.)  
ON-AIRPORT TENANT OUTPUT**

Associated City	Airport Name	First Round Output	Secondary Output	Total Output
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	\$1,125,100	\$551,900	\$1,677,000
Auburn	Farington Field	\$16,900	\$5,100	\$22,000
Aurora	Aurora Municipal	\$1,653,500	\$823,100	\$2,476,600
Cambridge	Cambridge Municipal		--Confidential--	
Central City	Central City	\$1,729,300	\$872,700	\$2,602,000
Cozad	Cozad Municipal Airport	\$685,100	\$334,300	\$1,019,400
Creighton	Creighton Municipal	\$6,000	\$1,800	\$7,800
Curtis	Curtis Municipal		--Confidential--	
David City	David City Municipal	\$397,300	\$194,200	\$591,500
Fairbury	Fairbury Municipal		--Confidential--	
Fairmont	Fairmont State	\$664,400	\$200,700	\$865,100
Grant	Grant Municipal	\$1,487,300	\$762,700	\$2,250,000
Hartington	Hartington Municipal	\$0	\$0	\$0
Hebron	Hebron Municipal	\$7,000	\$2,100	\$9,100
Hyannis	Grant County Airport	\$3,000	\$900	\$3,900
Loup City	Loup City Municipal		--Confidential--	
Minden	Pioneer Village Field	\$944,900	\$476,100	\$1,421,000
Omaha	Omaha-North	\$765,500	\$375,800	\$1,141,300
Oshkosh	Garden County Airport	\$187,100	\$88,400	\$275,500
Red Cloud	Red Cloud Municipal	\$0	\$0	\$0
Scribner	Scribner State	\$183,200	\$55,300	\$238,500
South Sioux City	Martin Field		--Confidential--	
Tekamah	Tekamah	\$1,332,900	\$668,700	\$2,001,600
Thedford	Thomas Co.	\$4,800	\$1,500	\$6,300
Wallace	Wallace Municipal	\$0	\$0	\$0
<b>Local Airports Subtotal</b>		<b>\$14,200,500</b>	<b>\$6,942,200</b>	<b>\$21,142,700</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	\$2,081,100	\$994,500	\$3,075,600
<b>Limited Airports Subtotal</b>		<b>\$2,351,100</b>	<b>\$1,077,100</b>	<b>\$3,428,200</b>
<b>Total</b>		<b>\$616,568,300</b>	<b>\$295,721,900</b>	<b>\$912,290,200</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

monies, these expenditures ripple throughout Nebraska's economy. For example if an airport FBO were to construct a hangar on an airport, a significant amount of money would be spent in the area's economy on construction materials, labor, and other services.

Total direct annual output by on-airport tenants is estimated at nearly \$616.6 million. Secondary tenant-related output or spending impacts are estimated at over \$295.7 million. When direct and secondary impacts are combined, the total output for on-airport tenants at Nebraska's airports is estimated at nearly \$912.3 million. Total output for National-category airports is over \$858.8 million and nearly \$53.5 million for Regional, Local, and Limited airports.

## 2. Commercial Airline Visitor Related Output

**Table 17** identifies the output attributable to visitors using Nebraska's airports with airline service. Direct output is comparable to visitor expenditures for restaurants, hotels/motels, retail, entertainment, and other services. Total direct output from commercial airline visitors in calendar

year 2002 was estimated at \$458.5 million. As the service industries re-spend this direct output in the statewide economy, monies continue to circulate resulting in secondary impacts. These secondary impacts related to visitor output or spending were estimated at approximately \$277.3 million. The total output from airline visitors using Nebraska's airports in calendar year 2002 was over \$735.8 million.

**TABLE 17**  
**Nebraska Economic Impact Study**  
**COMMERCIAL AIRLINE VISITOR-RELATED OUTPUT**

Associated City	Airport Name	First Round Output	Secondary Output	Total Output
<b>Commercial Airports</b>				
Alliance	Alliance Municipal	\$179,100	\$108,300	\$287,400
Chadron	Chadron Municipal Airport	\$209,100	\$126,400	\$335,500
Grand Island	Central Nebraska Regional	\$1,164,000	\$703,800	\$1,867,800
Kearney	Kearney Municipal	\$1,054,500	\$637,600	\$1,692,100
Lincoln	Lincoln Municipal	\$49,349,300	\$29,839,100	\$79,188,400
McCook	McCook Municipal	\$368,200	\$222,600	\$590,800
Norfolk	Karl Stefan Memorial Airport	\$266,300	\$161,000	\$427,300
North Platte	North Platte Regional/Lee Bird	\$1,212,800	\$733,300	\$1,946,100
Omaha	Eppley Field	\$402,917,300	\$243,624,400	\$646,541,700
Scottsbluff	Western Nebraska Regional	\$1,829,300	\$1,106,100	\$2,935,400
<b>Total</b>		<b>\$458,549,900</b>	<b>\$277,262,600</b>	<b>\$735,812,500</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

### 3. *General Aviation Visitor Related Output*

**Table 18** identifies the output attributable to general aviation visitors using Nebraska's airports. Direct output is comparable to visitor expenditures for restaurants, hotels/motels, retail, entertainment, and other services. Total direct output from general aviation visitors in 2002 was estimated at approximately \$10.82 million. As the service industries re-spend this direct output in the statewide economy, monies continue to circulate resulting in secondary impacts. These secondary impacts related to general aviation visitor output or spending were estimated at \$6.56 million. The total output from visitors arriving at Nebraska's airports by general aviation aircraft in calendar year 2002 was nearly \$17.4 million. General aviation visitor output at Nebraska's National airports was \$10.95 million for calendar year 2002. General aviation visitor output at Regional, Local, and Limited airports was \$6.43 million.

### 4. *Total Output*

The total combined impact of tenant, commercial airline visitor, and general aviation visitor output is identified in **Table 19**. Statewide direct total output was nearly \$1.1 billion in 2002. Secondary impacts were estimated at more than \$579.4 million. The combination of direct and secondary output impacts from both tenants and visitors to Nebraska's airports produced a total statewide output of nearly \$1.66 billion. Of this total output, almost \$1.61 billion was attributable to Nebraska's National-category airports. Output at Regional, Local, and Limited airports is equal to \$59.6 million.

**TABLE 18**  
**GENERAL AVIATION VISITOR-RELATED OUTPUT**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Output</b>	<b>Secondary Output</b>	<b>Total Output</b>
<b>National Airports</b>				
Alliance	Alliance Municipal	\$176,400	\$107,100	\$283,500
Beatrice	Beatrice Municipal	\$138,900	\$84,400	\$223,300
Chadron	Chadron Municipal Airport	\$58,800	\$35,700	\$94,500
Columbus	Columbus Municipal	\$264,600	\$160,700	\$425,300
Fremont	Fremont Municipal Airport	\$182,300	\$110,700	\$293,000
Grand Island	Central Nebraska Regional	\$335,200	\$203,600	\$538,800
Hastings	Hastings Municipal	\$294,000	\$178,500	\$472,500
Kearney	Kearney Municipal	\$503,500	\$305,800	\$809,300
Lincoln	Lincoln Municipal	\$1,225,500	\$744,200	\$1,969,700
McCook	McCook Municipal	\$264,600	\$160,700	\$425,300
Norfolk	Karl Stefan Memorial Airport	\$323,400	\$196,400	\$519,800
North Platte	North Platte Regional/Lee Bird	\$529,300	\$321,400	\$850,700
Omaha	Eppley Field	\$1,237,700	\$751,600	\$1,989,300
Plattsmouth	Plattsmouth Municipal	\$279,300	\$169,600	\$448,900
Scottsbluff	Western Nebraska Regional	\$382,200	\$232,100	\$614,300
Sidney	Sidney Municipal	\$486,100	\$295,200	\$781,300
Valentine	Miller Field	\$30,200	\$18,300	\$48,500
York	York Municipal	\$102,900	\$62,500	\$165,400
<b>National Airports Subtotal</b>		<b>\$6,814,900</b>	<b>\$4,138,500</b>	<b>\$10,953,400</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	\$73,500	\$44,600	\$118,100
Albion	Albion Municipal	\$29,400	\$17,900	\$47,300
Blair	Blair Municipal	\$26,500	\$16,100	\$42,600
Broken Bow	Broken Bow Municipal	\$32,300	\$19,600	\$51,900
Crete	Crete Municipal	\$64,700	\$39,300	\$104,000
Falls City	Brenner Field	\$79,400	\$48,200	\$127,600
Gordon	Gordon Municipal	\$58,800	\$35,700	\$94,500
Holdrege	Brewster Field	\$79,400	\$48,200	\$127,600
Imperial	Imperial Municipal	\$35,300	\$21,400	\$56,700
Kimball	Kimball Municipal	\$47,000	\$28,500	\$75,500
Lexington	Jim Kelly	\$58,800	\$35,700	\$94,500
Nebraska City	Nebraska City Municipal	\$39,700	\$24,100	\$63,800
Neligh	Antelope County	\$67,600	\$41,100	\$108,700
Ogallala	Searle Field	\$90,900	\$55,200	\$146,100
Omaha	Omaha-Millard Field	\$952,700	\$578,600	\$1,531,300
O'Neill	O'Neill Municipal/John Baker Field	\$105,900	\$64,300	\$170,200
Ord	Evelyn Sharp Field	\$67,600	\$41,100	\$108,700
Seward	Seward Municipal	\$95,600	\$58,100	\$153,700
Superior	Superior Municipal	\$14,700	\$8,900	\$23,600
Wahoo	Wahoo Municipal	\$88,200	\$53,600	\$141,800
Wayne	Wayne Municipal	\$29,400	\$17,900	\$47,300
<b>Regional Airports Subtotal</b>		<b>\$2,137,400</b>	<b>\$1,298,100</b>	<b>\$3,435,500</b>

TABLE 18 (Cont.)  
GENERAL AVIATION VISITOR-RELATED OUTPUT

Associated City	Airport Name	First Round Output	Secondary Output	Total Output
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	\$29,400	\$17,900	\$47,300
Auburn	Farington Field	\$23,500	\$14,300	\$37,800
Aurora	Aurora Municipal	\$139,700	\$84,800	\$224,500
Cambridge	Cambridge Municipal	\$36,800	\$22,300	\$59,100
Central City	Central City	\$51,200	\$31,100	\$82,300
Cozad	Cozad Municipal Airport	\$69,100	\$42,000	\$111,100
Creighton	Creighton Municipal	\$5,900	\$3,600	\$9,500
Curtis	Curtis Municipal	\$16,200	\$9,800	\$26,000
David City	David City Municipal	\$14,700	\$8,900	\$23,600
Fairbury	Fairbury Municipal	\$14,700	\$8,900	\$23,600
Fairmont	Fairmont State	\$6,500	\$3,900	\$10,400
Grant	Grant Municipal	\$23,500	\$14,300	\$37,800
Hartington	Hartington Municipal	\$23,500	\$14,300	\$37,800
Hebron	Hebron Municipal	\$17,600	\$10,700	\$28,300
Hyannis	Grant County Airport	\$3,700	\$2,200	\$5,900
Loup City	Loup City Municipal	\$10,300	\$6,300	\$16,600
Minden	Pioneer Village Field	\$79,400	\$48,200	\$127,600
Omaha	Omaha-North	\$36,800	\$22,300	\$59,100
Oshkosh	Garden County Airport	\$67,600	\$41,100	\$108,700
Red Cloud	Red Cloud Municipal	\$11,800	\$7,200	\$19,000
Scribner	Scribner State	\$14,700	\$8,900	\$23,600
South Sioux City	Martin Field	\$202,900	\$123,200	\$326,100
Tekamah	Tekamah	\$235,200	\$142,800	\$378,000
Thedford	Thomas Co.	\$2,900	\$1,800	\$4,700
Wallace	Wallace Municipal	\$339,600	\$206,200	\$545,800
<b>Local Airports Subtotal</b>		<b>\$1,477,200</b>	<b>\$897,000</b>	<b>\$2,374,200</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	\$387,000	\$235,000	\$622,000
<b>Limited Airports Subtotal</b>		<b>\$387,000</b>	<b>\$235,000</b>	<b>\$622,000</b>
<b>Total</b>		<b>\$10,816,500</b>	<b>\$6,568,600</b>	<b>\$17,385,100</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

**TABLE 19  
TOTAL OUTPUT**

<b>Associated City</b>	<b>Airport Name</b>	<b>First Round Output</b>	<b>Secondary Output</b>	<b>Total Output</b>
<b>National Airports</b>				
Alliance	Alliance Municipal	\$2,372,300	\$1,045,800	\$3,418,100
Beatrice	Beatrice Municipal	\$1,268,800	\$584,500	\$1,853,300
Chadron	Chadron Municipal Airport	\$1,092,900	\$498,400	\$1,591,300
Columbus	Columbus Municipal	\$7,089,000	\$2,594,600	\$9,683,600
Fremont	Fremont Municipal Airport	\$3,746,000	\$1,819,400	\$5,565,400
Grand Island	Central Nebraska Regional	\$14,304,000	\$6,835,600	\$21,139,600
Hastings	Hastings Municipal	\$478,000	\$246,300	\$724,300
Kearney	Kearney Municipal	\$6,494,500	\$3,231,000	\$9,725,500
Lincoln	Lincoln Municipal	\$316,811,800	\$155,145,200	\$471,957,000
McCook	McCook Municipal	\$5,914,400	\$2,991,100	\$8,905,500
Norfolk	Karl Stefan Memorial Airport	\$2,504,500	\$1,205,800	\$3,710,300
North Platte	North Platte Regional/Lee Bird	\$10,026,700	\$4,419,900	\$14,446,600
Omaha	Eppley Field	\$662,561,700	\$373,396,800	\$1,035,958,500
Plattsmouth	Plattsmouth Municipal	\$732,500	\$402,000	\$1,134,500
Scottsbluff	Western Nebraska Regional	\$7,004,900	\$3,461,100	\$10,466,000
Sidney	Sidney Municipal	\$2,196,300	\$1,145,400	\$3,341,700
Valentine	Miller Field	\$523,700	\$243,300	\$767,000
York	York Municipal	\$808,500	\$371,100	\$1,179,600
<b>National Airports Subtotal</b>		<b>\$1,045,930,500</b>	<b>\$559,637,300</b>	<b>\$1,605,567,800</b>
<b>Regional Airports</b>				
Ainsworth	Ainsworth Municipal	\$259,500	\$100,800	\$360,300
Albion	Albion Municipal	\$29,400	\$17,900	\$47,300
Blair	Blair Municipal	\$170,600	\$59,600	\$230,200
Broken Bow	Broken Bow Municipal	\$1,510,300	\$777,500	\$2,287,800
Crete	Crete Municipal	\$526,600	\$256,600	\$783,200
Falls City	Brenner Field	\$267,500	\$130,800	\$398,300
Gordon	Gordon Municipal	\$360,800	\$179,300	\$540,100
Holdrege	Brewster Field	\$3,393,300	\$1,733,600	\$5,126,900
Imperial	Imperial Municipal	\$1,414,900	\$724,200	\$2,139,100
Kimball	Kimball Municipal	\$1,422,700	\$726,400	\$2,149,100
Lexington	Jim Kelly	\$1,588,500	\$792,100	\$2,380,600
Nebraska City	Nebraska City Municipal	\$853,200	\$386,500	\$1,239,700
Neligh	Antelope County	\$460,700	\$225,700	\$686,400
Ogallala	Searle Field	\$1,137,300	\$392,700	\$1,530,000
Omaha	Omaha-Millard Field	\$3,478,700	\$1,840,400	\$5,319,100
O'Neill	O'Neill Municipal/John Baker Field	\$871,400	\$440,100	\$1,311,500
Ord	Evelyn Sharp Field	\$70,000	\$41,900	\$111,900
Seward	Seward Municipal	\$397,700	\$213,100	\$610,800
Superior	Superior Municipal	\$2,171,400	\$1,113,600	\$3,285,000
Wahoo	Wahoo Municipal	\$792,300	\$414,700	\$1,207,000
Wayne	Wayne Municipal	\$411,600	\$197,000	\$608,600
<b>Regional Airports Subtotal</b>		<b>\$21,588,400</b>	<b>\$10,764,500</b>	<b>\$32,352,900</b>

TABLE 19 (Cont.)  
TOTAL OUTPUT

Associated City	Airport Name	First Round Output	Secondary Output	Total Output
<b>Local Airports</b>				
Atkinson	Atkinson Municipal	\$1,154,500	\$569,800	\$1,724,300
Auburn	Farington Field	\$40,400	\$19,400	\$59,800
Aurora	Aurora Municipal	\$1,793,200	\$907,900	\$2,701,100
Cambridge	Cambridge Municipal	\$50,100	\$26,400	\$76,500
Central City	Central City	\$1,780,500	\$903,800	\$2,684,300
Cozad	Cozad Municipal Airport	\$754,200	\$376,300	\$1,130,500
Creighton	Creighton Municipal	\$11,900	\$5,400	\$17,300
Curtis	Curtis Municipal	\$499,800	\$256,000	\$755,800
David City	David City Municipal	\$412,000	\$203,100	\$615,100
Fairbury	Fairbury Municipal	\$260,600	\$127,000	\$387,600
Fairmont	Fairmont State	\$670,900	\$204,600	\$875,500
Grant	Grant Municipal	\$1,510,800	\$777,000	\$2,287,800
Hartington	Hartington Municipal	\$23,500	\$14,300	\$37,800
Hebron	Hebron Municipal	\$24,600	\$12,800	\$37,400
Hyannis	Grant County Airport	\$6,700	\$3,100	\$9,800
Loup City	Loup City Municipal	\$118,000	\$60,100	\$178,100
Minden	Pioneer Village Field	\$1,024,300	\$524,300	\$1,548,600
Omaha	Omaha-North	\$802,300	\$398,100	\$1,200,400
Oshkosh	Garden County Airport	\$254,700	\$129,500	\$384,200
Red Cloud	Red Cloud Municipal	\$11,800	\$7,200	\$19,000
Scribner	Scribner State	\$197,900	\$64,200	\$262,100
South Sioux City	Martin Field	\$2,359,600	\$1,227,900	\$3,587,500
Tekamah	Tekamah	\$1,568,100	\$811,500	\$2,379,600
Theedford	Thomas Co.	\$7,700	\$3,300	\$11,000
Wallace	Wallace Municipal	\$339,600	\$206,200	\$545,800
<b>Local Airports Subtotal</b>		<b>\$15,677,700</b>	<b>\$7,839,200</b>	<b>\$23,516,900</b>
<b>Limited Airports</b>				
Other Airports	Other Airports	\$2,468,100	\$1,229,500	\$3,697,600
<b>Limited Airports Subtotal</b>		<b>\$2,468,100</b>	<b>\$1,229,500</b>	<b>\$3,697,600</b>
<b>Total</b>		<b>\$1,085,664,700</b>	<b>\$579,470,500</b>	<b>\$1,665,135,200</b>

Source: Wilbur Smith Associates, Inc. &amp; IMPLAN multipliers

#### D. Combined Economic Impact

When the 2002 direct and secondary impacts from all on-airport tenants, commercial airline visitors, and general aviation visitors are combined, the total economic benefit stemming from Nebraska's airports is quantified. In 2002, the total statewide employment attributable to airports with airline service in Nebraska was estimated at nearly 27,900 full-time equivalent positions; total annual payroll for these jobs was estimated at \$579.5 million; and total output was estimated at nearly \$1.67 billion. Total output is approximately 3 percent of the State's GSP. **Table 20** summarizes the combined economic impact for all Nebraska airport tenants, commercial airline visitors, and general aviation visitors.

The substantial economic benefit from secondary impacts (the multiplier effect) provides a stimulus to almost every sector of the Nebraska economy. For example, direct FBO impacts are found in the transportation sector, direct airport management impacts are typically initiated in the construction sector, and visitor impacts begin in the trade and services sectors.

**TABLE 20  
TOTAL STATEWIDE ECONOMIC IMPACT**

	<b>First Round Impact</b>	<b>Secondary Impact</b>	<b>Total Impact</b>
<b>Employment</b>			
Airport Tenants	4,543	2,732	7,276
Commercial Airline Visitors	14,346	5,743	20,089
General Aviation Visitors	405	119	524
<b>Total Employment</b>	<b>19,294</b>	<b>8,594</b>	<b>27,888</b>
<b>Payroll</b>			
Airport Tenants	\$167,274,200	\$74,725,900	\$242,000,000
Commercial Airline Visitors	\$239,776,015	\$152,951,685	\$392,727,700
General Aviation Visitors	\$6,763,400	\$3,819,300	\$10,582,700
<b>Total Payroll</b>	<b>\$413,813,615</b>	<b>\$231,496,885</b>	<b>\$645,310,400</b>
<b>Output</b>			
Airport Tenants	\$616,298,300	\$295,639,300	\$911,937,600
Commercial Airline Visitors	\$458,549,900	\$277,262,600	\$735,812,500
General Aviation Visitors	\$10,816,500	\$6,568,600	\$17,385,100
<b>Total Output</b>	<b>\$1,085,664,700</b>	<b>\$579,470,500</b>	<b>\$1,665,135,200</b>

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

#### 4. CAPITAL IMPROVEMENT-RELATED CONSTRUCTION SPENDING IMPACTS

Nebraska's system of airports produces another type of impact that is not reported in the discussions above. Each year, many of the State's airports undertake capital improvement projects, such as runway rehabilitation, hangar construction, land acquisition, etc. These projects employ many persons not otherwise related to the airport, such as jobs in construction and consulting. In this section, economic impacts related to capital improvement construction spending are analyzed.

##### A. Employment Impacts

This study's findings support the conclusion that on-airport construction projects are a significant source of jobs in Nebraska. Direct employment from construction activities at Nebraska's airports accounts for approximately 664 jobs. These jobs are comprised of those people who are engaged directly in these projects – construction workers, equipment operators, foremen, management, etc. Secondary employment due to on-airport construction jobs accounts for another 868 jobs. These jobs are created by the multiplier effects stemming from direct construction jobs. For example, an employee of a hardware supplier may owe part of his job to a construction company that maintains the runway pavement at the local airport.

In total, about 1,532 jobs annually are associated with airport construction projects in Nebraska.

##### B. Payroll Impacts

The payroll impacts attributable to construction spending at Nebraska's airports are important to the State's economy as well. The findings of this study show that about \$20.61 million are paid in wages to construction service workers directly employed in capital improvement projects at the State's airports. Another \$15.37 million is paid to secondary employees involved in related industries, such as the hardware supplier employee in the example above.

A total of approximately \$35.97 million in wages are paid each year to employees involved in on-airport capital improvement-related construction.

##### C. Output Impacts

Output is synonymous with economic activity, and includes annual gross sales and capital expenditures of firms involved in on-airport construction. Direct output by companies involved in construction services at Nebraska's airports equals about \$37.29 million. Another \$26.2 million comes from secondary output impacts, such as those stemming from the hardware supply company in the example above.

In all, about \$63.49 million in output is generated each year by capital improvement-related construction spending at Nebraska's airports.

Total economic impacts for capital improvement-related construction spending at all of Nebraska's airports are shown in **Table 21**. Average impacts per \$100,000 of capital improvement spending are presented in **Table 22**. These impacts are not included in Table 20.

**Table 21**  
**CONSTRUCTION-RELATED IMPACTS**

	First-Round Impact	Secondary Impact	Total Impact
Employment	663.8	868.2	1,532.0
Payroll	\$20,608,000	\$15,366,000	\$35,974,000
Output	\$37,290,271	\$26,196,359	\$63,486,630

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

<b>Table 22</b>			
<b>CONSTRUCTION-RELATED IMPACTS</b>			
Per \$100,000 in CIP Spending			
	First-Round Impact	Secondary Impact	Total Impact
Employment	1.8	2.3	4.1
Payroll	\$55,264	\$41,206	\$96,470
Output	\$100,000	\$70,250	\$170,250

Source: Wilbur Smith Associates, Inc. & IMPLAN multipliers

## 5. ECONOMIC IMPACTS OF OFF-AIRPORT AERIAL APPLICATORS

Agricultural aerial applicators, or ag sprayers, are located both on and off Nebraska’s system of airports. Many of the off-airport ag sprayers operate on airstrips located on their own ranch while others are transient in nature and operate at both publicly owned and privately owned airports, taking their entire operation and equipment to areas of the State where there is demand for agricultural spraying. **Table 23** identifies the economic impact off-airport ag sprayers provide to the State. There are 43 first round jobs in the ag spray industry which are located outside the State’s system of airports. These businesses generate nearly \$8.4 million in first round spending. Total economic benefit for these businesses is estimated at 12.6 million in output and over 78 jobs. These off-airport impacts are not included in the total impacts identified in Table 20.

**Table 23**  
**Economic Impact of Off-Airport Aerial Applicators**

	First Round Impact	Secondary Impact	Total Impact
Employment	39.5	29.8	69.3
Payroll	\$961,300	\$493,000	\$1,454,300
Output	\$8,359,600	\$4,243,400	\$12,603,000

## 6. TAX IMPACTS

Two taxes collected in Nebraska directly impact the aviation industry, the State’s property tax and aviation fuel tax.

### A. Property Tax

There are several major state and local taxes that support public spending in Nebraska. These taxes include the local property tax, the state and local sales and compensating use tax, the individual and corporate income tax, state motor fuels tax, motor vehicle taxes and fees, and motor vehicle registration fees.

According Nebraska Department of Property Assessment and Taxation, property taxes continued to bear the largest load of the total tax burden in Nebraska in 2001. Net property taxes (net means after subtracting homestead exemptions or other credit programs) comprise 32 percent of the entire burden. Income taxes, individual and corporate, combine to contribute 28.2 percent of the total; sales taxes constitute 25.1 percent of the total. There are nearly 3,000 different political subdivisions in Nebraska that have authority to levy a property tax, many of which overlap in a countless number of ways. These subdivisions have the authority to levy property taxes to fund services ranging from very specific ones, like maintaining a cemetery or community college, to very general ones, like cities or counties. The rate the taxpayer pays is the rate set by each of the political subdivisions in which the property is located added together. The base for the property tax is assessed value of property located in the taxing jurisdiction. Assessed value is determined in different ways for each of three basic types of property: personal property, real property, and centrally assessed property.

Businesses on airports pay property taxes based on the political subdivisions they are located in. In addition, airlines and air cargo companies pay taxes based on the value of their flight equipment. An air carrier's taxable value allocation to Nebraska is based on the average of three factors:

- Arrivals & departures
- Revenue tons
- Originating revenue

Nebraska Department of Property Assessment and Taxation reports indicate nearly \$2.0 million in air carrier taxes were distributed to Nebraska counties in 2002. Estimates of aviation related businesses property tax were derived based on tenant survey data. Property taxes for aviation related businesses, but not including air carrier activity are estimated at \$1.6 million. Total impact of aviation to the State’s property tax subdivisions is estimated at \$3.6 million. This is less than 1 percent of the State’s \$1.9 billion in levied property taxes.

### B. Fuel Tax

Nebraska has a \$0.03 per gallon fuel tax on Jet A and a \$0.05 per gallon fuel tax on AvGas. In 2002, 46,861,338 gallons of Jet A were sold in the State and 2,512,152 gallons of AvGas. These fuel sales generated over \$1.5 million in fuel taxes.

	Gallons Sold	Fuel Tax
Jet A	46,861,338	\$1,405,840
Av Gas	<u>2,512,152</u>	<u>\$125,608</u>
Total	49,373,490	\$1,531,448

## 7. QUALITATIVE AIRPORT BENEFITS

While previous sections of this study focused on the quantitative benefits resulting from aviation in Nebraska, there are also a number of qualitative benefits that must be discussed when the total value of an airport or an airport system is analyzed. Qualitative benefits are those factors for which dollar values cannot be readily assigned. Qualitative benefits are those activities which take place at an airport on a regular basis that add to the quality of life of residents in the airport's market area. Qualitative benefits are generally considered benefits regarding health, welfare, or safety. While it may be difficult to place a dollar value on such impacts, these benefits improve the quality of life of Nebraska's residents in a variety of ways. Among these benefits are activities such as medical flights, police patrol, forest fire fighting, pest control, traffic reporting, educational opportunities, high profile visitors and government official arrival, and recreational benefits.

A key focus of the airport management surveys conducted as part of the inventory phase of the study was to identify specific examples of qualitative benefits provided by each Nebraska airport. While the demographics of individual market areas and available facilities greatly influence each airport's ability to provide such benefits, each airport provides important qualitative benefits. **Table 23** presents the specific benefits identified for each airport. While this matrix is not all-encompassing, it does provide an important overview of the diversity of benefits that airports provide to Nebraska, beyond the creation of jobs, payroll, and output. **Exhibit 3** depicts graphically the type of aviation activity for airports identified in Table 21. Aviation activities in Table 21 were consolidated into eight aviation categories. These categories are:

- *Recreational/Gateway* - This category includes recreation flying and flying to airports for pursuing recreational activities in the airports market area.
- *Agricultural Spraying* - This category includes the use of aircraft to apply agricultural fertilizers, pesticides or seeding applications.
- *Corporate Use* – Many businesses use aircraft for conducting business activity either by businesses in the airport's market area or by businesses flying to the airport's market area to conduct business within the airport's market area.
- *Air Cargo* – many industries rely on air cargo. Airports with regularly scheduled air cargo service are identified.
- *Law Enforcement* - This category includes law enforcement activity by federal, state and local agencies. It also includes prisoner transport activities.
- *Military* – Military activities includes military exercises and flight training activity.
- *Emergency Access* – Emergency access includes grassland and forest firefighting, search and rescue activity as well as wildlife management.
- *Medical* - This category includes medical evacuation of patients via air ambulance, travel

by physicians via aircraft to hold clinics at rural hospitals, and the use of aircraft for medical shipments.

It should be noted that the levels of activity indicated are based on airport management estimates. These activities should be viewed as predominate aviation activities at the respective airport and does not mean other aviation activities do not take place at the facility.

**Table 24  
ON-AIRPORT ACTIVITIES**

Associated City	AIRPORT NAME	Recreation/Personal Use	Ag. Spraying	Business Use	Aerial Inspect.	Ship Perish.	Air Cargo	Recreation Gateway	Special Events	Law Enforcement	Prison Transport	Military	Career/Fight Training	Search/Rescue	Environmental Patrol	MedEvac	Physician Travel	Medical Shipments	Firefighting	Aerial Photography	Real Estate	Banner Tow	Traffic/News	Air Shows
<b>National Airports</b>																								
Alliance	Alliance Municipal	H	H	M	M	M	H	M	L	H	L	L	M	L	L	M	H	M	L	L	L			L
Beatrice	Beatrice Municipal	M	H	M	M	L	H	M	L	L	L	M	H	L	L	L	L	L	L	L				L
Chadron	Chadron Municipal	M	L	M	L	L	L	M	L	L	L	M	M	M	L	H	H	M	L	L	L			
Columbus	Columbus Municipal	H	L	L	L	L	L	M	M	L	L	L	L	L	L	H	M	M	M	L	L			
Fremont	Fremont Municipal	M		M	M			L		L	L	L	M	M	L		L	L	L	M	M	L		
Grand Island	Central Nebraska Regional	H	L	H	L	H	H	M	M	M	M	M	H	M	L	M	L	L	L	L	L			
Hastings	Hastings Municipal	M	H	H	L	L	H			L				M			M	L	L					
Kearney	Kearney Municipal	H	H	H	L	H	H	M	M	M	M	M	H	L	L	H	L	L	L	L	L	L		L
Lincoln	Lincoln Municipal	M	H	H		M	L	L	L	L	L	H		L		M	H	M	L	L		L	L	L
McCook	McCook Municipal	M	H	M		L	M	L	L	L	L	L	L			M	H	M	L					L
Norfolk	Karl Stefan Memorial	H	H	H	L	L	M	L	H	L	L	L	L	L	L	H	H	H	M		L	M	L	L
North Platte	North Platte Regional/Lee Bird	M	M	H			M	L	L	L				M		M	H	M	L	L				L
Omaha	Eppley Field	M	L	H	M	H	H	M	M	H	H	M	M	M	M	H	H	H	L	M	M		H	
Plattsmouth	Plattsmouth Municipal	H	L	L				M				L	L	L		H	M	M	M					
Scottsbluff	Western Nebraska Regional	H	H	H	L	M	H	L	L	H	M	M	M	L	L	M	H	M	L	L	L			
Sidney	Sidney Municipal	H		H	M	L	H	M	M	L	L	L	H	L		M	H	M	L	L				L
Valentine	Miller Field	M		M		L		M	M					M		H	H	H	M	M				
York	York Municipal	H	L	H	H	L		M	L	M		M	H	L	L	M	L	L	L	L				L
<b>Regional Airports</b>																								
Ainsworth	Ainsworth Municipal	M	M	M	M		M	L	L	L				L		H	H	L	L	L	L			
Albion	Albion Municipal	H	L	L				M					L	L	L	H	M	M	M					
Blair	Blair Municipal	M		M	L		M	L	L	L	L	H	M		L	L	L	L	L	L	L	L		
Broken Bow	Broken Bow Municipal	H	H	L				M	L	L	L	L	L	L	L	H	M	M	M	L	L			
Crete	Crete Municipal	H	L	M	M	L	M	H	M	L	L	H	H			M	M	L	M	L				
Falls City	Brenner Field	M	M	M	L	L	L			L	L	L	M	L		L	M	L	L	L				
Gordon	Gordon Municipal	H	L	M	L	L	L	M	M	L	L	L	M	M	L	H	M	H	L	M	M	L	L	M
Holdrege	Brewster Field	M	H	M	L			L	L	L	L	L	L	L	L	M	H	M	L	L	L	L	L	L
Imperial	Imperial Municipal	M	H	H	L			L	L	L	L	L	L	L	L	H	H	H	L	L	L			L
Kimball	Kimball Municipal	M	L	M	L		L	M	M	L	L	H	L	L	L	M	L	L	L	L	L			L
Lexington	Jim Kelly	H	H	H	L		L	L	L			L	M	L	L	M	L	L	L	L	L			L
Nebraska City	Nebraska City Municipal	H	L	M	L			L	L	L			L	L	L	L	L	L	L	L				L
Neligh	Antelope County	M	H	M	L			L	M	L	L	L	M	L		M	H	M	L	L	L			M
Ogallala	Searle Field	H	L	L				M				L	L	L	L	H	M	M	M					
Omaha	Omaha-Millard Field	H	L	H	M	L	L	H	L	M	M	M	H	M	M	M	L	M	L	M	M		H	
O'Neill	O'Neill Municipal/John Baker Field	H	L	L				M				L	L	L		H	M	M	M					
Ord	Evelyn Sharp Field	H	M	M	L			L	L	L	L	L	L	L	L	M	M	M	M	M				L
Seward	Seward Municipal	H	L	L	L			M	L	L	L	L	L	L	L	H	M	M	M	L	L			
Superior	Superior Municipal	M	H	M	L			L	M					L	L	L	M	L	L	L				L
Wahoo	Wahoo Municipal	H	H	L				M	L	L	L	L	L	L	L	H	M	M	M	L	L			
Wayne	Wayne Municipal	H	M	H	L	L	M	M	M	M	L	L	M	L	L	L	M	H	L	M	L			
<b>Local Airports</b>																								
Atkinson	Atkinson Municipal	H	L	L				M				L	L	L		H	M	M	M					
Auburn	Farrington Field	H	L	L	L	L		L	M	L	L	L	L	L	L		M	L	M	M				L
Aurora	Aurora Municipal	H	H	M	M			L	L	M	L	L	L	L	L	L	M	L	L	L	L			
Cambridge	Cambridge Municipal	L	H	L				L	L							L	L	L	L	L				
Central City	Central City	H	H	M	L			M	M		L	M		L	L	M	L	L	L	L	L			L
Cozad	Cozad Municipal	M	H	M				M								M	L	L	L	L				
Creighton	Creighton Municipal	M	L	M	L		L	M	M	L	L		L	L	L	L	H	L	L	L	L			L
Curtis	Curtis Municipal	M	H	L	L			L					L	L		L	L	L	L	L				L
David City	David City Municipal	M	H	L	L			L	M	L	L	M	L		L	L	L	L	L	L	L			M
Fairbury	Fairbury Municipal	M	H	M				L	M	L	L	L	L	L	L	L	L		L	L	L			L
Fairmont State	Fairmont State	M	M	M	L			L			L	L	L	L		M		L	L	L				L
Grant	Grant Municipal	H	H	L	L			M	L	L	L	L	L	L	L	H	H	M	M	L	L			
Hartington	Hartington Municipal	H	L	L				M				L	L	L		H	M	M	M					
Hebron	Hebron Municipal	M	M	L	L				M		L		L		M	M	M	L	L	L				
Hyannis	Grant County	M	L	L				L	L						L	L	L	L	L	L				
Loup City	Loup City Municipal	H	H	L		L		M	L	L				L	L	L	L	L	L	L				
Minden	Pioneer Village Field	H	H	L	L			M	L	L	L	L	L	L	L	H	M	M	M	M	L			L
Omaha	Omaha-North	M	M	L	L			L	L	L	L	L	L	L	L	L	M	M	M	M	L			L
Oshkosh	Garden County	M	M	M				M	M					M	L	H	M	M	M	M	M			
Red Cloud	Red Cloud Municipal	H	M	L				M			L	L	L	L		H	M	M	M					
Scribner	Scribner State	M	M	M				L						L		L			L	L				
South Sioux City	Martin Field	H	L	L	L			M	M	L	L	L	L	L	L	H	M	M	M	L	L			M

Table 24 (cont.)  
ON-AIRPORT ACTIVITIES

Associated City	AIRPORT NAME	Recreation/Personal Use	Ag. Spraying	Business Use	Aerial Inspect.	Ship Perish.	Air Cargo	Recreation Gateway	Special Events	Law Enforcement	Prison Transport	Military	Career/Flight Training	Search/Rescue	Environmental Patrol	MedEvac	Physician Travel	Medical Shipments	Firefighting	Aerial Photography	Real Estate	Banner Tow	Traffic/News	Air Shows	
Tekamah	Tekamah	M	H	L	H			L	L	M		L	L		L	M	L	L		L				L	
Thedford	Thomas Co.	H	L	L	L			M	L	L	L	L	L	L	L	H	M	M	M	L	L				
Wallace	Wallace Municipal	H	M	L				M				L	L	L		H	M	M	M						
<b>Limited Airports</b>																									
Alma	Alma Municipal	M	M	M	L			L		L			L	L	L	L	L	L	L	L	M				
Arapahoe	Arapahoe Municipal	M	M	H	L		L	M	L					L	L	L	L	L			M	M			
Arthur	Arthur Municipal	L																							
Bassett	Rock County	L	H	M												L	M	L							
Bloomfield	Bloomfield Municipal	M	H	M	L			L	M	M	L			L	L	L			L	L	L			L	
Burwell	Cram Field	M	L					L									L								
Chambers	Perkins Memorial	M	M	M												L	L	L							
Chappell	Billy G Ray Field	M	M	M	L			L		L			L	L		L	L	L	L						
Genoa	Genoa Municipal	M	L	M	L			L	M	L		L	L			L	L			L	L			L	
Gothenburg	Quinn Field	L	M	L				L	L			L	L	L		L	L	L	L	L					L
Greeley	Greeley Municipal	M	L	H	L			M		L			L	L	L	L	L	L	L	L	L		L	L	L
Harvard	Harvard State Airfield	M	M					L						L			L								L
Hay Springs	Hay Springs Municipal	M	M	M	L			L	L				L	L		L	L	L	L						
Mullen	Hooker County	L	L	L																					
Pawnee City	Pawnee City Municipal	M	M	M	L			L		L			L	L		L	L	L	L						
Pender	Pender Municipal	M	M	M	L			L	L	L			L	L		L	L	L	L						
Rushville	Modisett Field	M	H	L	L			M	L	L	L			L	L	L	L	L	L	L					
Sargent	Sargent Municipal	M	M	L	L			M	L	L				L	L	L	M	L	M	L	L				L
Springview	Springview Municipal	M	M	M	L			L	L	L			L	L		L	L	L	L	L					
Stromsburg	Stromsburg Municipal	L	M	L							L						L			L					
Tecumseh	Tecumseh Municipal	H	M	M	M			L	L	M	L	M				L	M	L		M	L				L
Trenton	Trenton Municipal	M	L	L						L						L									
Utica	Flying "V"	M	M	M	L			L		L			L	L		L	L	L	L						
Wilber	Wilber Municipal	M	M	M	L			L		L			L	L		L	L	L	L						

Source: Airport management data, hospital survey data and ag sprayer survey data.

## 8. BUSINESS USE OF NEBRASKA AIRPORTS

Many businesses throughout the U.S. depend on commercial service airlines as well as on general aviation aircraft to add to their productivity and efficiency. Previous sections of this economic impact analysis have quantified the economic benefits associated with the activities of aviation-related on-airport tenants and of the visitors who arrive in the State via general aviation aircraft and commercial airlines. The many qualitative health, welfare, and safety benefits of Nebraska's system of airports have also been highlighted. But these measures alone do not represent the full spectrum of benefits that the State derives from the day-to-day operation of its airport system. Many employers are the benefactors of valued-added benefits that result from the increased efficiency of air travel. This section discusses the additional benefits that non-aviation businesses throughout Nebraska gain as a result of the operation of the State's system of airports.

Nebraska's airline-served airports are essential to the economic vitality of the citizens and businesses of Nebraska. Without these airports, the State would be severely hampered in its ability to participate in an increasingly global community and marketplace. Commercial air service makes possible the quick movement of millions of people and millions of dollars worth of goods to markets around the world. Nebraska needs to be able to compete in global markets, and there is often no practical alternative to air transportation. Similarly, the growth of a competitive domestic economy depends more and more on the ability to move by aircraft.

A major benefit of Nebraska's airports with airline service is the State's ability to use air transportation to support its competitive advantage in a global economy. Today's economy can present commercial opportunities at any time and in any place. To remain competitive and take advantage of potential opportunities, Nebraska must be able to move people and products anywhere in the world safely, quickly, and conveniently. Air transportation is the preeminent means for commerce and communication, with long-range jet aircraft providing nonstop air service to major cities. The overall benefit of Nebraska's airline-served airports is enormous.

Tourism, which depends on the airlines, is Nebraska's third largest earner of revenue from outside the state after agriculture and manufacturing. Statewide, travel and tourism directly employs approximately 46,200 people<sup>2</sup>. No Nebraska citizen has to look far to find a friend, neighbor, or relative who is employed by a company that relies on Nebraska's airline-served airports. The transportation benefit provided by these 10 airports in Nebraska is significant.

Many of the nation's leading employers that use general aviation as a business tool are members of the National Business Aircraft Association (NBAA). The NBAA's *Business Aviation Fact Book 2000* indicates that approximately 70 percent of all businesses included in the *Fortune 500* operate general aviation aircraft. In addition, 90 of the *Fortune 100* companies operate general aviation aircraft. A detailed analysis conducted for NBAA in 1998 also indicated that among the *Fortune 500* there were more than twice as many companies operating general aviation aircraft as non-operators.

Business use of general aviation aircraft can range from the rental of small single-engine aircraft to

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<sup>2</sup> Nebraska Department of Economic Development, <http://info.neded.org/tourfact.htm>, 2002 Statistics

multiple aircraft corporate fleets that are supported by dedicated flight crews and mechanics. The use of general aviation aircraft allows employers to efficiently transport priority personnel and air cargo. Businesses use general aviation aircraft to link multiple office locations and to reach existing and potential customers. The use of business aircraft by smaller companies has escalated as various chartering, leasing, time-sharing, interchange agreements, partnerships, and management contracts have emerged. NBAA statistics support this claim by indicating that the number of flight departments among all the nation's businesses increased from 6,584 in 1991 to 8,778 in 2000, an increase of approximately 33 percent. Fractional ownership arrangements have also experienced a recent rapid growth. In 1998, NBAA estimated that 1,125 companies used fractional ownership arrangements; by 2000 that number had grown to 1,693 companies, a growth of over 50 percent in a single year.

Regardless of how the aircraft are owned or what type of aircraft is flown, businesses choose to use general aviation because it provides safe, efficient, flexible, and reliable transportation. Of all the benefits provided to business by general aviation, flexibility is the highest ranked factor by all businesses using general aviation aircraft. While there are many reasons that businesses use general aviation in their day-to-day operation, the top 10 factors, according to the businesses contacted by the NBAA, are as follows:

- ❑ *Flexibility*
- ❑ *Time Savings*
- ❑ *Reliability*
- ❑ *Safety*
- ❑ *Improved Marketing Efficiency*
- ❑ *Facility/Branch Office Control*
- ❑ *Personnel Development Training*
- ❑ *Privacy and Comfort*
- ❑ *Efficiency*
- ❑ *Security*

One other benefit that is becoming increasingly important to both employees and employers using general aviation aircraft for business travel is that it minimizes non-business hours away from home. Using business aircraft increases the flexibility of scheduling and provides rapid, safe, and efficient access to meeting locations. These factors allow employees using general aviation aircraft to travel to and from their destination in less time than would be required by a traditional commercial service airline schedule. The positive effect that minimizing non-business time away from home has on employee morale and productivity is impossible to measure, yet growing in importance.

The use of general aviation as a business tool adds to productivity and to the bottom line. According to an NBAA survey of key *Forbes* and *Fortune 500* companies, those businesses that use general aviation aircraft routinely significantly outperform businesses that do not use general aviation aircraft. Performance indicators such as annual sales, number of employees, value of assets, and annual income are significantly higher for employers using general aviation aircraft.

## 9. MEASURING VALUE ADDED IMPACTS

Approximately 3,000 businesses throughout Nebraska were surveyed to assess their dependence on aviation. The 3,000 businesses included in the survey were randomly selected from a pool of businesses in the manufacturing, transportation, telecommunications, engineering/consulting, and utility sectors. The sectors targeted in this study represent those with greater propensities to use airline service and general aviation.

The survey was generally oriented towards gaining information on business use of aviation. Survey results indicate that many businesses depend on the system of airports on a daily basis. Without access to general aviation and airline-served airports, businesses indicated that their companies would be forced to cut employment or possibly relocate to an area with adequate access. Approximately 18 percent of all survey respondents indicated that their company owns, has fractional ownership, leases, or charters general aviation aircraft. In addition, approximately 32 percent of the respondents indicated that they have customers or suppliers who travel by general aviation to visit the surveyed company. Surveyed businesses indicated that commercial airline service is vitally important to Nebraska businesses. Approximately 70 percent of the survey respondents indicated that they have employees who travel by commercial airline service to conduct business. Approximately 58 percent of the respondents indicated that they have customers or clients who visit them using commercial airline service. Over 75 percent of respondents indicated they use integrated express cargo carriers such as UPS and FedEx, on a regular basis. These statistics provide some insight as to the importance of aviation to Nebraska's business community.

To estimate the statewide dependence on Nebraska's system of airports, each business surveyed was asked to provide information regarding its reliance on both general aviation and commercial air service for employment and sales. Considering the number and variety of businesses in the State, it is impossible to make exact estimates of the value-added benefit that Nebraska businesses derive from their use of the airport system. It is possible, however, to make estimates of aviation's importance to non-aviation businesses included in some specific economic sectors.

Each respondent to the non-aviation business survey was asked to estimate the percentage of employment reduction they would anticipate if, for some reason, general aviation and commercial airline service ceased to be available. Statewide, surveyed employers estimated a 15.2 percent reduction in their current employment levels without commercial airline service.

This survey focused on those types of businesses that have a high propensity to use aviation services, and a sample of the following SIC codes and types of businesses was surveyed:

- *SIC Codes 20 through 39*      *Manufacturing*
- *SIC Codes 40 through 49*      *Transportation, Communications, and Utilities*
- *SIC Codes 50 through 51*      *Wholesale Trade*
- *SIC Codes 60 through 67*      *Finance, Insurance and Real Estate*
- *SIC Codes 70 through 79*      *Business and Personal Services*
- *SIC Code 87*      *Engineering, Architectural, and Accounting*

By applying the survey results to the State's total number of employees *in only those SIC codes*

*surveyed in this analysis*, (approximately 289,800 employees); it is possible to develop an estimate of total employment in these sectors that is dependent on aviation. The results are as follows:

- *Statewide, approximately 44,000 full-time positions (15.2 percent of the 289,800 total employees in the sectors identified above) are dependent on airline service.*
- *Statewide, approximately 14,500 full-time positions (5.0 percent of the 289,800 total employees in the sectors identified above) are dependent on general aviation airports and services.*
- *Statewide, a total of approximately 58,500 full-time positions in the sectors identified above are in some way dependent on aviation.*

It is important to note that the 58,500 full-time positions identified through the survey process as being dependent on aviation are in the surveyed sectors. A large number of other economic sectors exist in Nebraska. Although these additional sectors may not have as high of a propensity to use aviation as the sectors included in the survey process, it is safe to assume that some portion of the total employment in these additional sectors is also dependent on aviation. Total employment identified as being dependent on aviation in this process is therefore a conservative estimate.

The final section of the business survey asked respondents to rank the importance of various factors that they would consider if they are contemplating relocating or expanding. Overall, the availability of an airport with airline service ranked fourth for its importance, and proximity to general aviation facilities ranked eighth out of the 13 factors considered. Highway access, labor supply, and availability of a trained workforce ranked first, second, and third, respectively. The rankings of the 13 location factors included in the survey are as follows:

- *Convenient highway access*
- *Availability of a trained workforce*
- *Tax incentives*
- ***Convenient airline access***
- *Proximity of suppliers*
- *Academic or cultural centers*
- *Urban business district*
- ***Convenient general aviation access***
- *Raw materials*
- *Natural resources*
- *Historic location*
- *Rail transportation facilities*
- *Water transportation facilities*

Businesses were also asked to indicate the impact of the 9/11 terrorist impacts to their aviation activity. The results are as follows:

- *Approximately 80 percent of the respondents indicated their use of commercial airline service for business functions remained unchanged.*

- *Approximately 18 percent of the respondents indicated their use of commercial airline service for business functions decreased. Commercial airline service activity decreased on average 32 percent among respondents*
- *Approximately 2 percent of the respondents indicated their use of commercial airline service for business functions increased. Aviation activity increased on average 33 percent among respondents.*
- *Approximately 91 percent of the respondents indicated their use of general aviation aircraft for business functions remained unchanged.*
- *Approximately 5 percent of the respondents indicated their use of general aviation aircraft for business functions decreased.*
- *Approximately 4 percent of the respondents indicated their use of general aviation aircraft for business functions increased. All respondents in this group own, lease or charter aircraft and, on average, increased their general aviation activity by 50 percent.*

The overall results of the business survey may be summarized as follows:

- *Approximately 70 percent of the respondents indicated they use commercial airline service related to their routine business functions.*
- *Approximately 18 percent of the survey respondents indicated they use general aviation aircraft related to their business activities by owning, leasing, or chartering.*
- *Approximately 58 percent of the responding businesses indicated that they have customers or suppliers who rely on commercial airline service when conducting business with their company.*
- *Approximately 32 percent of the responding businesses indicated that they have customers or suppliers who rely on general aviation aircraft when conducting business with their company.*
- *Employers indicated that, without the commercial airline service, total employment would be reduced by approximately 15.2 percent.*
- *Employers indicated that, without access to general aviation services and general aviation airports, total employment would be reduced by approximately 5.0 percent.*
- *Employers responding to the survey indicated that their employees make a total of approximately 27,500 annual commercial service airline trips and that their suppliers and clients make a total of approximately 13,000 annual commercial service airline trips at Nebraska airports.*

- *The most significant impacts caused by the terrorist attacks of 9/11 were to businesses using commercial service airlines for business functions. Eighteen percent of the respondents indicated their use of commercial airline service for business functions decreased. Commercial airline service activity decreased on average 32 percent among respondents.*

## **10. ECONOMIC IMPACTS BY AIRPORT**

The preceding economic impact analysis summarizes the significant contribution that Nebraska's system of airports makes to the State's economy. As shown by the results of the analysis, airports support first-round, as well as secondary, employment, payroll, and output benefits. These benefits come from on-airport tenants, commercial airline visitors and general aviation visitors, and capital improvement-related construction projects. The following appendices present the individual impact that each system airport provides. The individual findings for each airport are presented alphabetically by the airport's associated city.

# **AIRPORT-SPECIFIC NARRATIVES**

## **National Airports**

## **AIRPORT-SPECIFIC NARRATIVES**

### **Regional Airports**

## **AIRPORT-SPECIFIC NARRATIVES**

### **Local Airports**

## **AIRPORT-SPECIFIC NARRATIVES**

### **Limited Airports**